THE DARK SIDE OF GOING PUBLIC
CIO John D. Halamka wishes vendors weren't so obsessed with stock market pressures. **PAGE 14**

WINDOWS SERVERS
A wave of new desktop virtualization tools heads toward the IT mainstream. **PAGE 7**

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E-mail Outage Agitates Users

IT execs criticize BlackBerry vendor for slow release of info about snafu

BY MATT HAMBLEN

INSIDE
Crisis management consultants differ on RIM's handling of the outage. Page 10

The widespread BlackBerry outage in North America last week inconvenienced some corporate users of the popular wireless e-mail service. But what most irked them was the lack of an immediate explanation or frequent updates about the outage from BlackBerry vendor Research In Motion Ltd.

The outage began Tuesday evening, but RIM didn't issue a public statement acknowledging it until Wednesday afternoon — after the service had been restored. And it was late Thursday before the company explained that the problem was triggered by a flawed installation of cache optimization software and a subsequent system fail-over snafu.

The vendor apologized to BlackBerry users for the inconvenience. But customers such as David Maynor, chief

BlackBerry, page 10

Gender Gap Widens Within IT

Women depart due to hours, demands

BY BRIAN FONSECA
SAN DIEGO

Weary of responding to late-night alerts and troubleshooting calls, Bethany King had finally had enough. Six months ago, she closed the book on a 12-year stretch as a storage administrator to become an IT auditor.

"I had a 14-year-old daughter that I didn't want to leave alone at 3 a.m.," said King, who was allowed to shift to the more flexible IT position at The Empire District Electric Co., a Joplin, Mo.-based electricity supplier.

"That really was one of the reasons I got out. I could've made it work, but it's just a

Gender Gap, page 33

PHOTOGRAPHY CREDITS, CLOCKWISE FROM TOP LEFT: ANDY GOODWIN; FILE PHOTO; DANNY TURNER; ASU MATHAI; WEBB CHAPPELL; MARTIN LEFRE; DAVID JOEL; UNIVERSITY OF MIAMI

Not Your Daddy's DP Manager

PAGES 16 AND 20

Today's CIOs have strategic responsibilities and time pressures never imagined when the title emerged 20 years ago.

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2. Steal the keys to their spaceship.
It sounds desperate but it just might work. When they realize they're stuck here they may mellow out and try to work it out instead.

3. Sneeze on them.
It's likely Aliens have different immune systems from our own. Which means even the common cold could be deadly. Sneeze and cough in their direction, and spray when you talk—even if they are immune they may be grossed out enough to leave anyway.

4. Try negotiating. (Or not.)
They may not come in peace, but they are advanced. Pitch them as you would a client; explain why humanity should be spared in under 50 Microsoft® PowerPoint® slides, and then close the deal. Or just grab their feet and spin them around.

5. Play dumb, then run.
The Aliens may have no idea who's in charge. Tell them squirrels rule the Earth, and we humans are their slaves. When they start trying to negotiate with the squirrels, run and hide.

6. Fight dirty.
No one will blame you if you fight dirty. Against their superior weapons and superior intellect, you may need to scratch, kick, bite, play dead, or even apply an intergalactic "noogie". Our wedgies, however, are useless against their super-advanced alien undergarments.

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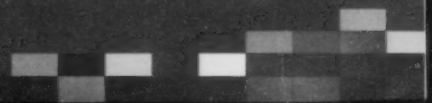

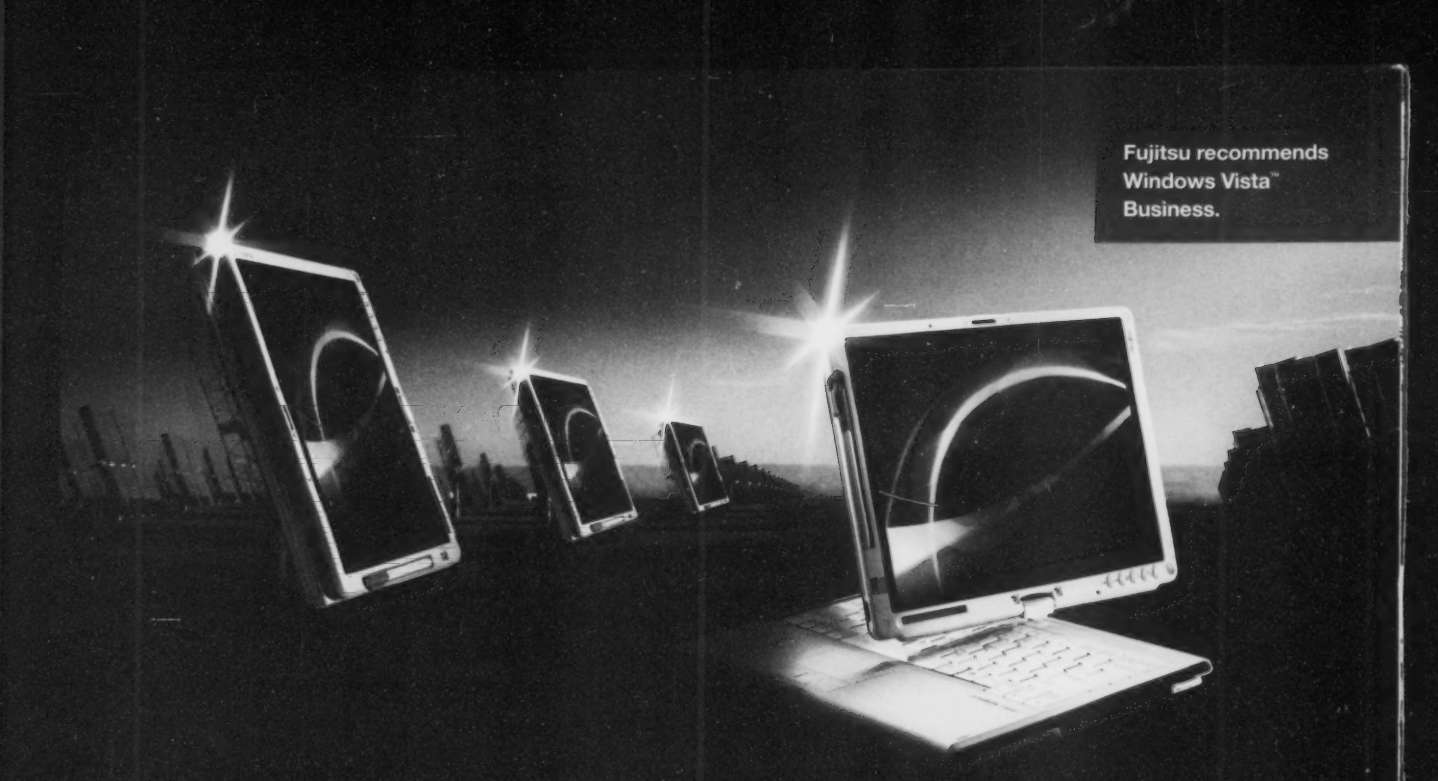

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CONTENTS

04.23.07

NEWS

6 HP will stop selling its AlphaServer systems on Friday, and some users may have to give up on OpenVMS as a result.

6 Arkansas expects to reimburse the federal government $44 million as a result of mistakes it made in billing state agencies for IT services over a nine-year period.

7 Desktop virtualization is moving toward the mainstream as Citrix and other vendors offer new software for running Windows clients off of servers.

7 Web 2.0 tools have been slow to penetrate IT shops because of fears that they'll cause data overload and security breaches.

8 Oracle unveils prebuilt adapters that can be used to integrate its business applications with third-party products and homegrown corporate software.

8 Q&A: Microsoft is working to broaden the reach of Visual Studio and take graphic and Web design business away from Adobe, says tools exec Soma Somasegar.

11 In emergencies such as the shooting rampage at Virginia Tech, sending out e-mail alerts may not be enough, according to IT managers who have deployed broader notification systems.

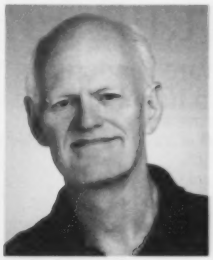
12 Global Dispatches: A bug is sending malicious messages to e-mail addresses stored in Skype VoIP systems.

33 Storage system virtualization is helping some users reduce management and equipment costs.

DEPARTMENTS & RESOURCES

At Deadline Briefs	6
News Briefs	9, 10
Letters	15
IT Careers	31
Company Index	32
How to Contact CW	32
Shark Tank	34

STRATEGIES & TACTICS



Suck-ups: Why CIOs Love Them

In an IT and business environment that ostensibly values employees who question authority, express their opinions and challenge the system, why is it that CIOs often seem to recognize and reward the fawning bootlickers and yes men? Leadership development trainer Marshall Goldsmith raises the question and explains how your dog can help you answer it. **Page 22**

16 Change Agents. Few roles have evolved as much as the CIO's over the past 20 years; the DP managers of yesteryear would hardly recognize today's IT chiefs.

20 Where Does the Time Go? An endless agenda of meetings, a crush of e-mail and lots of fires to douse: That's the daily grind for CIOs. We look at how four IT leaders do it all and still have lives outside of work.

24 Career Watch. Recruiting and retention challenges for the CIO; three takes on the CIO agenda for 2010 and beyond; and CIOs by the numbers.

26 Management by Procrastination. Conventional wisdom says never put off until tomorrow what you can do today. However, IT Mentor Thomas Cutting has found that for a project manager, procrastination works.

27 Security Manager's Journal: Be Careful What You Ask For . . . Mathias Thurman asks to be hacked, and that's exactly what he gets — with a bit of embarrassment thrown in for good measure.

OPINIONS

9 On the Mark: Mark Hall uncovers a search tool that goes where search giants like Google don't: online databases.

14 Don Tennant hopes that as CEO Mark Hurd prepares for Hewlett-Packard's Technology Forum & Expo 2007, he will demonstrate the candor and resolve he showed a decade ago.

14 John D. Halamka is one CIO who wishes the vendors he deals with wouldn't succumb to stock market pressures.

28 Paul M. Ingevaldson says sometimes a CIO has to choose between being a "team player" and being a truth teller.

34 Frankly Speaking: Frank Hayes argues that IT needs to become comfortable with using text messaging to warn users — especially the younger set — of emergencies.

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Top 10 Vista Hacks

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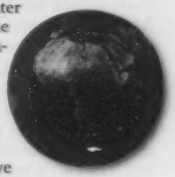

SERVERS: Two data center managers talk about the coveted LEED certification, how they earned it and why it matters to their businesses. Also, find out what you can do right now to conserve energy, save money and help the planet.
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FAQ: The Windows DNS Bug

SECURITY: Who's at risk, what you can do and when a patch is coming.
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How-To: Understanding Mac OS X Open Directory

SERVERS: This introduction to directory services in the Macintosh environment includes tips on how to manage search paths for shared domains, how to use the directory access utility and more.
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SNW Survey: Users Worry More About Upgrades Than Integration

STORAGE: Upgrades, interoperability and finding talent are among the biggest challenges storage users say they encounter.
www.computerworld.com/storage

Blade Servers and Virtualization *Can* Coexist

SERVERS: Independent consultant and author Barb Goldworm says there's a lot to be gained by using blades and virtualization together. She explains why and describes what she believes is some of the misinformation going around.
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AT DEADLINE

Lenovo Group to Cut 1,400 Jobs

Lenovo Group Ltd. said it plans to lay off 1,400 workers, or about 5% of its worldwide workforce. CEO William Amelio said the move is part of an effort to cut expenses, boost revenue and grow faster than its PC competitors. Lenovo estimated the cost of the restructuring at $50 million to $60 million.

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Medical software vendor says it won't support OS on Itanium-based servers

BY PATRICK THIBODEAU

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"It means we're in a lot of pain," said Dave Harrold, a lead systems administrator at a health care provider that he asked not be named. The company has four AlphaServers with 32 processors each that support Cerner Corp.'s Millennium medical applications.

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"We're just going to watch the market, and if there is huge demand for it, we will consider it," said Nill, who added that every platform Cerner has to support adds to its costs. But he also acknowledged that some users may interpret Cerner's position as a signal that sticking with OpenVMS isn't the right path to take.

David Dachtera, an OpenVMS systems administrator and Cerner user at a U.S.-based company that he asked not be identified, said the software vendor's decision to back HP-UX will mean an operating system change for him.

"Because Cerner is not going to VMS on Itanium, we're not going to VMS on Itanium — it's really that simple," Dachtera said. His company instead has decided to shift its Millennium applications to IBM servers running AIX, which Cerner also supports.

Cerner's plan does nothing to diminish HP's support for OpenVMS on Itanium, said Bill Hendrix, the computer maker's worldwide partner business manager. But Hendrix, who manages HP's relationship with Cerner, thinks that the software vendor's customer base has accepted the OpenVMS decision. "Cerner has certainly talked to a lot of their installed base," he said, "and their [users] don't seem to have a particular problem with the statements to date."

About 150,000 Alpha-based systems are still in use, IDC estimates. And Jean Bozman, an analyst at the market research firm, said she expects users to continue running them for a long time — seven to eight years on average.

Even though users won't be able to order new AlphaServers after Friday, getting more of the systems probably won't be difficult. HP has said it will sell refurbished systems, and there is a strong aftermarket for used machines.

For AlphaServer users who need more equipment, "I don't think you have to worry," said Ellen Moore, who buys Alpha-based systems for The Newman Group, a company in Dexter, Mich., that sells refurbished equipment.

End of the Line

APRIL 27: The last date for placing new AlphaServer orders, to be delivered by July 27.

APRIL 25, 2008: The cutoff date for ordering upgrades and add-ons for AlphaServer systems.

2012: HP says it will support the AlphaServer hardware for at least the next five years.

Arkansas Expects to Pay $44M for IT Billing Errors

BY LINDA ROSENCRANCE

The state of Arkansas has set aside $44 million to settle a 10-year-old dispute with the federal government stemming from the overbilling of some state agencies for technology services by the state's IT unit.

Richard Weiss, director of the Arkansas Department of Finance and Administration, said last week that the problem involved IT-related chargebacks assessed to state agencies that receive federal funding. The federal government determined that the Arkansas Department of Information Services (DIS) charged those agencies more than it should have and underbilled other agencies, Weiss said.

As a result, the federal government was paying more than its fair share for the IT services, according to Weiss, who said that the overbilling began during the state's 1997 fiscal year and continued through fiscal 2005.

"You can't charge the agencies that are supported in whole or in part by federal funds for the costs of running the penitentiary department, for example," he said. "But that's what was happening."

In 2002, the DIS received a letter from the U.S. Department of Health and Human Services saying that the state owed $9.4 million for billing errors between fiscal 1997 and fiscal 2000. But even after getting that letter, the IT unit continued its improper billing practices, Weiss said.

"Despite the fact that there were plenty of signals that went up along the way, and [the DIS] tried to do some fixes, in the end they did not fix the problem," he said. "It should have been handled before this."

Weiss added that it wasn't until the past two years that the finance department was brought in to help the DIS calculate the proper amounts to bill each agency. He also noted that most of the incorrect billing took place before current DIS Director Claire Bailey was hired in March 2004. "She is as interested as anyone to get this resolved," Weiss said.

A DIS spokeswoman referred all questions about the billing snafus to Weiss.

> **"Despite the fact that there were plenty of signals that went up along the way . . . in the end [the DIS] did not fix the problem."**
>
> **RICHARD WEISS,** DIRECTOR, ARKANSAS DEPARTMENT OF FINANCE AND ADMINISTRATION

Virtual Desktop Vendors Headed Toward Mainstream

Citrix, other firms add new tools for running Windows clients off of servers

BY ERIC LAI

Virtual desktops were once a relatively drab technology for call centers, schools and other undemanding IT environments. But a new breed of desktop virtualization tools is being aimed at mainstream corporate users by large and small vendors alike.

In addition, Microsoft Corp.'s recent releases of Windows Vista and Office 2007 have some companies rethinking how they want to deploy future desktop software upgrades. Microsoft itself helped that process along earlier this month by adding a software license that lets customers with Software Assurance maintenance and upgrade contracts run their Windows clients in virtual machines on servers.

Michael Koval, CIO at Long & Foster Real Estate Inc. in Fairfax, Va., is receptive to the new desktop virtualization offerings, having had positive experiences with earlier products such as Citrix Systems Inc.'s Presentation Server, as well as server virtualization software from VMware Inc.

"We're definitely looking at all of the options," Koval said. Long & Foster has used Presentation Server for the past seven years to deliver applications hosted on servers to more than 3,500 employees and 16,000 affiliated real estate agents. Besides centralizing management, the Citrix software has enabled the real estate firm to provide applications to end users on an as-needed basis, reducing the number of software licenses that Koval needs to buy.

Citrix acquired application streaming vendor Ardence Inc. in December, and two weeks ago, it announced a virtualization product called Desktop Server. The Fort Lauderdale, Fla.-based company claims to be the only vendor offering all forms of thin-client and virtual desktops under a common management infrastructure.

That's good news to Koval. "It's definitely more attractive," he said, "because then I don't have to go upstairs to ask for money to overhaul my entire infrastructure. I picked Citrix many years ago because they already had a lot of services under one roof. That trend has only continued."

New-Product Wave

Citrix isn't the only vendor introducing new products. Virtual Iron Software Inc., a developer of server virtualization tools in Lowell, Mass., and Provision Networks Inc., a desktop virtualization vendor in Reston, Va., announced last week that they're teaming up to offer a virtual desktop package that's priced at $120 per client.

And Austin-based ClearCube Technology Inc. said two weeks ago that the latest version of its PC blade software, due next month, includes a connection broker that can manage virtual desktops via links to VMware's server virtualization tools.

Virtual Toolbox

Citrix Desktop Server 1.0:

- Delivers Windows clients to desktop systems from data center servers.
- Supports virtual desktops, PC blades and Microsoft's Terminal Services software.
- Scheduled to be released during this quarter.

ClearCube Sentral Version 5.5:

- Manages combinations of VMware-enabled virtual desktops and physical PC blades.
- Includes an abstraction layer for supporting other virtualization technologies in the future.
- Scheduled for general availability next month.

Although desktop virtualization is technically possible using VMware's software alone, "logistical hurdles" make that approach cumbersome for most users, according to Brian Madden, principal analyst at The Brian Madden Company LLC in Silver Spring, Md.

"The smart vendors took a lot of notes and went to developers to make [virtual desktops] happen," Madden said. "That's why you're seeing a wave of products just now hitting the market."

But, he added, most of the products remain point solutions, offering application streaming, terminal services or desktop virtualization — but not all three. Citrix is the only vendor to have announced "a true end-to-end offering," Madden said.

Despite the new offerings, users such as Station Casinos Inc. are staying on the sidelines for the time being.

Station would seem to be a good candidate for virtual desktops. At its various properties, the Las Vegas-based casino operator has 3,500 Windows-based PCs that are shared by 15,000 employees over three work shifts daily. Many of the PCs are lightly used; 30% don't even have Office installed on them.

But Steve Bastille, IT director for server and desktop systems at Station, said he sees no economic incentive to move to virtual desktops at this point.

"We have not been able to justify the additional server hardware costs and infrastructure needed," he said, pointing to the need for network upgrades and the purchase of other software licenses.

Frank Yawn, IT manager at Time Warner Cable Inc.'s office in Greensboro, N.C., has used Ardence's software for the past two years to stream applications to 400 call center PCs. But Yawn has little interest in adding other types of virtualized desktops. "Whenever you introduce something new," he said, "rarely does the cost go down."

Data-Source Issues Hinder IT Embrace of Web 2.0 Tools

Some users wary of using RSS feeds, wikis and blogs

BY NANCY GOHRING AND JUAN CARLOS PEREZ

The biggest roadblocks to extending Web 2.0 technologies to corporate users are data overload and a lack of information accountability, according to some users and analysts.

"Today, people are drowning in data, and RSS is another source to drown them," said David Lifka, director of high-performance and innovative computing at Cornell University in Ithaca, N.Y.

Corporate users need tools that can filter information from Web 2.0 sources like RSS feeds, wikis and blogs, flagging relevant data and blocking out the rest, Lifka said at Microsoft Corp.'s IT Pro Town Meeting in Redmond, Wash., last week.

Michael Cherry, an analyst at Directions on Microsoft in Kirkland, Wash., noted at the event that wider corporate use of such technologies has also been slowed by the lack of a system that can vouch for the integrity of Web 2.0 data.

People should be able to determine the precise source of data and examine the credibility of the source, he said. Currently, "users don't know if it's the right data or interpreted correctly, or [whether] it is pulled from the right database," he added.

The U.S. Department of Energy now offers identity certificates, but the IT industry may not want to rely on the government for such programs, Lifka said. And at this point, he added, there are no widespread corporate efforts to set such standards and policies.

Despite such issues, some IT organizations have found ways to safely take advantage of select Web 2.0 technologies.

> **People are drowning in data, and RSS is another source to drown them.**
>
> DAVID LIFKA, DIRECTOR OF HIGH-PERFORMANCE AND INNOVATIVE COMPUTING, CORNELL UNIVERSITY

Mike Suding, IT director of Citrix Systems Inc.'s online division in Santa Barbara, Calif., said eTouch Systems Corp.'s SamePage enterprise wiki has improved collaboration in the unit's engineering and sales departments.

The wiki has so far required minimal IT intervention, Suding noted. "I can make [a user] an admin of a certain space or project, and they can add their own members and invite their own people to participate and post their own texts or graphics or attachments," he said.

To do the same task using the Citrix unit's existing intranet, e-mail and collaboration systems would be more complicated, he said.

"E-mail comes and goes, and we wanted a place to collect and build," Suding said. "Web 2.0 is about employee collaboration and empowerment and self-service. That's what we're achieving with the wiki."

Rob Enderle, an analyst at Enderle Group in San Jose, said he expects that more businesses will embrace Web 2.0 technologies once the data issues are resolved.

"It's just a case of getting over the hurdles," he said. "Clearly, the market is moving in this direction, but many things prevent it from moving very quickly."

Gohring and Perez write for the IDG News Service.

AT DEADLINE

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"Because Cerner is not going to VMS on Itanium, we're not going to VMS on Itanium — it's really that simple," Dachtera said. His company instead has decided to shift its Millennium applications to IBM servers running AIX, which Cerner also supports.

Cerner's plan does nothing to diminish HP's support for OpenVMS on Itanium, said Bill Hendrix, the computer maker's worldwide partner business manager. But Hendrix, who manages HP's relationship with Cerner, thinks that the software vendor's customer base has accepted the OpenVMS decision. "Cerner has certainly talked to a lot of their installed base," he said, "and their [users] don't seem to have a particular problem with the statements to date."

About 150,000 Alpha-based systems are still in use, IDC estimates. And Jean Bozman, an analyst at the market research firm, said she expects users to continue running them for a long time — seven to eight years on average.

Even though users won't be able to order new AlphaServers after Friday, getting more of the systems probably won't be difficult. HP has said it will sell refurbished systems, and there is a strong aftermarket for used machines.

For AlphaServer users who need more equipment, "I don't think you have to worry," said Ellen Moore, who buys Alpha-based systems for The Newman Group, a company in Dexter, Mich., that sells refurbished equipment. ▸

End of the Line

APRIL 27: The last date for placing new AlphaServer orders, to be delivered by July 27.

APRIL 25, 2008: The cutoff date for ordering upgrades and add-ons for AlphaServer systems.

2012: HP says it will support the AlphaServer hardware for at least the next five years.

Arkansas Expects to Pay $44M for IT Billing Errors

BY LINDA ROSENCRANCE

The state of Arkansas has set aside $44 million to settle a 10-year-old dispute with the federal government stemming from the overbilling of some state agencies for technology services by the state's IT unit.

Richard Weiss, director of the Arkansas Department of Finance and Administration, said last week that the problem involved IT-related chargebacks assessed to state agencies that receive federal funding. The federal government determined that the Arkansas Department of Information Services (DIS) charged those agencies more than it should have and underbilled other agencies, Weiss said.

As a result, the federal government was paying more than its fair share for the IT services, according to Weiss, who said that the overbilling began during the state's 1997 fiscal year and continued through fiscal 2005.

"You can't charge the agencies that are supported in whole or in part by federal funds for the costs of running the penitentiary department, for example," he said. "But that's what was happening."

In 2002, the DIS received a letter from the U.S. Department of Health and Human Services saying that the state owed $9.4 million for billing errors between fiscal 1997 and fiscal 2000. But even after getting that letter, the IT unit continued its improper billing practices, Weiss said.

"Despite the fact that there were plenty of signals that went up along the way, and [the DIS] tried to do some fixes, in the end they did not fix the problem," he said. "It should have been handled before this."

Weiss added that it wasn't until the past two years that the finance department was brought in to help the DIS calculate the proper amounts to bill each agency. He also noted that most of the incorrect billing took place before current DIS Director Claire Bailey was hired in March 2004. "She is as interested as anyone to get this resolved," Weiss said.

A DIS spokeswoman referred all questions about the billing snafus to Weiss. ▸

> **"Despite the fact that there were plenty of signals that went up along the way . . . in the end [the DIS] did not fix the problem."**
>
> RICHARD WEISS, DIRECTOR, ARKANSAS DEPARTMENT OF FINANCE AND ADMINISTRATION

Virtual Desktop Vendors Headed Toward Mainstream

Citrix, other firms add new tools for running Windows clients off of servers

BY ERIC LAI

Virtual desktops were once a relatively drab technology for call centers, schools and other undemanding IT environments. But a new breed of desktop virtualization tools is being aimed at mainstream corporate users by large and small vendors alike.

In addition, Microsoft Corp.'s recent releases of Windows Vista and Office 2007 have some companies rethinking how they want to deploy future desktop software upgrades. Microsoft itself helped that process along earlier this month by adding a software license that lets customers with Software Assurance maintenance and upgrade contracts run their Windows clients in virtual machines on servers.

Michael Koval, CIO at Long & Foster Real Estate Inc. in Fairfax, Va., is receptive to the new desktop virtualization offerings, having had positive experiences with earlier products such as Citrix Systems Inc.'s Presentation Server, as well as server virtualization software from VMware Inc.

"We're definitely looking at all of the options," Koval said. Long & Foster has used Presentation Server for the past seven years to deliver applications hosted on servers to more than 3,500 employees and 16,000 affiliated real estate agents. Besides centralizing management, the Citrix software has enabled the real estate firm to provide applications to end users on an as-needed basis, reducing the number of software licenses that Koval needs to buy.

Citrix acquired application streaming vendor Ardence Inc. in December, and two weeks ago, it announced a virtualization product called Desktop Server. The Fort Lauderdale, Fla.-based company claims to be the only vendor offering all forms of thin-client and virtual desktops under a common management infrastructure.

That's good news to Koval. "It's definitely more attractive," he said, "because then I don't have to go upstairs to ask for money to overhaul my entire infrastructure. I picked Citrix many years ago because they already had a lot of services under one roof. That trend has only continued."

New-Product Wave

Citrix isn't the only vendor introducing new products. Virtual Iron Software Inc., a developer of server virtualization tools in Lowell, Mass., and Provision Networks Inc., a desktop virtualization vendor in Reston, Va., announced last week that they're teaming up to offer a virtual desktop package that's priced at $120 per client.

And Austin-based ClearCube Technology Inc. said two weeks ago that the latest version of its PC blade software, due next month, includes a connection broker that can manage virtual desktops via links to VMware's server virtualization tools.

Virtual Toolbox

Citrix Desktop Server 1.0:

- Delivers Windows clients to desktop systems from data center servers.
- Supports virtual desktops, PC blades and Microsoft's Terminal Services software.
- Scheduled to be released during this quarter.

ClearCube Sentral Version 5.5:

- Manages combinations of VMware-enabled virtual desktops and physical PC blades.
- Includes an abstraction layer for supporting other virtualization technologies in the future.
- Scheduled for general availability next month.

Although desktop virtualization is technically possible using VMware's software alone, "logistical hurdles" make that approach cumbersome for most users, according to Brian Madden, principal analyst at The Brian Madden Company LLC in Silver Spring, Md.

"The smart vendors took a lot of notes and went to developers to make [virtual desktops] happen," Madden said. "That's why you're seeing a wave of products just now hitting the market."

But, he added, most of the products remain point solutions, offering application streaming, terminal services or desktop virtualization — but not all three. Citrix is the only vendor to have announced "a true end-to-end offering," Madden said.

Despite the new offerings, users such as Station Casinos Inc. are staying on the sidelines for the time being.

Station would seem to be a good candidate for virtual desktops. At its various properties, the Las Vegas-based casino operator has 3,500 Windows-based PCs that are shared by 15,000 employees over three work shifts daily. Many of the PCs are lightly used; 30% don't even have Office installed on them.

But Steve Bastille, IT director for server and desktop systems at Station, said he sees no economic incentive to move to virtual desktops at this point.

"We have not been able to justify the additional server hardware costs and infrastructure needed," he said, pointing to the need for network upgrades and the purchase of other software licenses.

Frank Yawn, IT manager at Time Warner Cable Inc.'s office in Greensboro, N.C., has used Ardence's software for the past two years to stream applications to 400 call center PCs. But Yawn has little interest in adding other types of virtualized desktops. "Whenever you introduce something new," he said, "rarely does the cost go down." ▸

Data-Source Issues Hinder IT Embrace of Web 2.0 Tools

Some users wary of using RSS feeds, wikis and blogs

BY NANCY GOHRING AND JUAN CARLOS PEREZ

The biggest roadblocks to extending Web 2.0 technologies to corporate users are data overload and a lack of information accountability, according to some users and analysts.

"Today, people are drowning in data, and RSS is another source to drown them," said David Lifka, director of high-performance and innovative computing at Cornell University in Ithaca, N.Y.

Corporate users need tools that can filter information from Web 2.0 sources like RSS feeds, wikis and blogs, flagging relevant data and blocking out the rest, Lifka said at Microsoft Corp.'s IT Pro Town Meeting in Redmond, Wash., last week.

Michael Cherry, an analyst at Directions on Microsoft in Kirkland, Wash., noted at the event that wider corporate use of such technologies has also been slowed by the lack of a system that can vouch for the integrity of Web 2.0 data.

People should be able to determine the precise source of data and examine the credibility of the source, he said. Currently, "users don't know if it's the right data or interpreted correctly, or [whether] it is pulled from the right database," he added.

The U.S. Department of Energy now offers identity certificates, but the IT industry may not want to rely on the government for such programs, Lifka said. And at this point, he added, there are no widespread corporate efforts to set such standards and policies.

Despite such issues, some IT organizations have found ways to safely take advantage of select Web 2.0 technologies.

> **People are drowning in data, and RSS is another source to drown them.**
>
> **DAVID LIFKA,** DIRECTOR OF HIGH-PERFORMANCE AND INNOVATIVE COMPUTING, CORNELL UNIVERSITY

Mike Suding, IT director of Citrix Systems Inc.'s online division in Santa Barbara, Calif., said eTouch Systems Corp.'s SamePage enterprise wiki has improved collaboration in the unit's engineering and sales departments.

The wiki has so far required minimal IT intervention, Suding noted. "I can make [a user] an admin of a certain space or project, and they can add their own members and invite their own people to participate and post their own texts or graphics or attachments," he said.

To do the same task using the Citrix unit's existing intranet, e-mail and collaboration systems would be more complicated, he said.

"E-mail comes and goes, and we wanted a place to collect and build," Suding said. "Web 2.0 is about employee collaboration and empowerment and self-service. That's what we're achieving with the wiki."

Rob Enderle, an analyst at Enderle Group in San Jose, said he expects that more businesses will embrace Web 2.0 technologies once the data issues are resolved.

"It's just a case of getting over the hurdles," he said. "Clearly, the market is moving in this direction, but many things prevent it from moving very quickly." ▸

Gohring and Perez write for the IDG News Service.

Oracle Builds Links to Its Business Apps

Says integration suite could help IT, other vendors create new workflows

BY MARC L. SONGINI

ORACLE CORP. last week introduced application integration technology that it said can be used to tie its software to products from other vendors and to homegrown applications.

The new Oracle Application Integration Architecture, announced at the Collaborate '07 user conference in Las Vegas, includes a set of prebuilt adapters that can create business workflows between applications using the Oracle Fusion common object model and the industry-standard Business Process Execution Language.

"This is a step in the right direction for Oracle," said David Rudzinsky, CIO at Hologic Inc. in Bedford, Mass. The medical instruments maker uses Oracle's E-Business Suite applications, but the new offering "will allow us to choose best-of-breed applications without the integration worries," Rudzinsky said.

Jose Lazares, Oracle's vice president of application development and strategy, said that the new offering will enable corporate customers to create links between internally built software and Oracle's business applications.

Jan Wagner, London-based director of financial operations and internal review at NATO, a user of Oracle's E-Business Suite 11i software, said that capability could cut IT development and maintenance costs for users.

Wagner is also president of the Oracle Applications Users Group, which co-sponsored last week's conference along with the database-oriented Independent Oracle Users Group and the Quest International Users Group. He noted that the adapters being added by Oracle eliminate the need for developers to create links between different systems and to support those links.

Lazares said Oracle also expects that the links will help independent software vendors integrate their offerings with Oracle applications.

Oracle contends that the new tool set will complement its integrated line of Fusion applications — which promises to link Oracle's myriad internally built and acquired applications. It is slated to be shipped next year.

NEW PRODUCT

- Creates business processes for Oracle applications
- Includes out-of-the-box adapters
- Includes reference models that provide documentation

Oracle Application Integration Architecture also includes Industry Reference Models, which Oracle described as a set of tools and documentation to help users create workflows that exploit both Oracle and non-Oracle applications.

The first adapters, slated to ship in May, cover Oracle's Siebel CRM and Siebel CRM On Demand products.

The Oracle Siebel CRM On Demand Integration Pack for the Oracle E-Business Suite will enable customers to support a complete sales process without leaving the Siebel application, Oracle said. It also noted that sales leads can be converted into quotes or orders in Oracle's back-end ERP applications.

Another adapter will let Siebel users conduct complex product configurations, see inventory availability and automatically process orders, the company said.

Lazares added that Oracle is also planning future adapters for its banking, call center and trade promotions software.

Bill Swanton, an analyst at AMR Research Inc. in Boston, said in a research note that the new tools will let corporations implement cross-functional business processes.

However, he warned that the success of the offerings depends on Oracle ensuring that the adapters don't become too complex or expensive for customers to implement. ▸

Microsoft Working to Broaden Reach of Its Development Tools

BY ERIC LAI
REDMOND, WASH.

Microsoft Corp.'s developer division is readying a slew of new products, including a set of multimedia design tools aimed at Adobe Systems Inc. users. **Soma Somasegar**, *corporate vice president of the developer unit, spoke with* Computerworld *last week. Excerpts follow:*

Some people in your division have already blogged that the next version of Visual Studio, code-named Orcas, will be released this year. True? We are about to release the first beta of Orcas. It's not feature-complete, as we plan to put out a second beta later this year. Orcas will have a consistent programming model that spans multiple platforms — the Web, Vista, Longhorn Server, etc. That way, you as a developer only have to learn one programming model and understand one set of tools.

In Visual Studio 2003, we were really fixated on the professional developer. In Visual Studio 2005, we were focused on the beginning developer. With Orcas, we plan to cover the breadth of developers.

Users don't always welcome new tools, especially if they replace old ones. For example, there have been the petitions asking you not to retire Visual Basic 6 and, recently, Visual FoxPro. It's hard to hear that you have to go and learn something else. Some of these transitions have been smooth, others not so smooth. We want to be mindful that when transitions occur, there is a good reason and real customer benefit to them.

How do you plan to entice graphic and Web designers to use your new Expression and Silverlight tools? They tend to be extremely loyal to Adobe. I understand why you would say that. Our thinking is that [Web] developers will appreciate the deep collaboration they will be able to have with developers working in Visual Studio. I also think it's a matter of showing that we will continue to provide more value with our products. And I think that people do change over time. ▸

SAP Set to Expand NetWeaver Line

BY MARC L. SONGINI

SAP AG this week is expected to roll out what it is calling the final piece of a set of service-oriented architecture (SOA) technologies built to support its business applications.

An SAP spokesman said that the new SOA-based NetWeaver products will be unveiled at the Sapphire 2007 user conference in Atlanta. However, he declined to provide details on the products to be introduced.

The NetWeaver line includes a portal, a business data warehouse and data cleansing tools. The technology lets users create workflows for linking SAP and non-SAP applications, the vendor claimed.

The spokesman said that SAP also plans to announce that it has extended agreements with third-party vendors, including Adobe Systems Inc., to expand NetWeaver support in their applications.

The company's governance, risk and compliance unit will also announce new products during the conference, he said.

Rodney Masney, global director of IT infrastructure services at Owens-Illinois Inc., a Perrysburg, Ohio-based maker of packaging materials, said there is a great deal of interest among customers in learning about SAP's SOA offerings, though his company has no plans to use them at this time.

Masney, also president of the Americas' SAP Users' Group, said that his company is currently rolling out SAP's mySAP 2004 ERP applications to its offices worldwide.

A potential downside to SAP's SOA efforts, Masney noted, is the abrupt departure last month of Shai Agassi, who was president of the SAP product and technology group and the architect of the company's SOA strategy. "We're sad to see Shai go," said Masney. "He was a man of tremendous vision and breadth and depth, and a key to SAP's overall NetWeaver platform strategy."

The SAP spokesman contended that Agassi's departure won't affect the company's strategy and that the SOA team continues to execute Agassi's strategy.

David Dobrin, an analyst at B2B Analysts Inc. in Cambridge, Mass., said that SAP also needs to show users that it intends to focus less on its competition with rival Oracle Corp. and more on building better products for its users.

The vendor should work to develop lighter, more flexible applications with Web 2.0 interfaces that are attractive to both business users and consumers, he said. ▸

BRIEFS

Oracle Delays Database Patch

Some Oracle Corp. customers will have to wait until April 30 to receive a critical database update because of a glitch found during testing of the company's latest patches. Oracle had released the update as part of last week's quarterly release of patches to fix 36 vulnerabilities in its software. The delayed patch will fix a serious flaw in Version 9.2.0.8 of the Oracle database.

Dodgeball Founders Quit Google Posts

Dennis Crowley and Alex Rainert, the founders of a mobile social networking company Google Inc. acquired in 2005, have resigned their posts at the search engine firm to pursue other opportunities. Their departures follow complaints around the blogosphere that the Dodgeball service has languished under Google's ownership. Google confirmed that the two have left but contended that it is committed to the mobile social networking business.

Carlyle Withdraws Bid for Chip Maker

The Carlyle Group has scrapped a proposal to buy Advanced Semiconductor Engineering Inc. (ASE), a Taiwan-based chip packaging and testing company, for $5.5 billion. The offer had been awaiting regulatory approval by Taiwan's government. The private equity firm halted negotiations after ASE shareholders called for it to increase its bid.

Intel Plans to Add WiMax to Centrino

Intel Corp. has announced plans to add WiMax capabilities to its Centrino processor next year, a long-expected move that's likely to boost demand for wireless broadband services. The company said it will offer the WiMax capabilities as an option to Montevina, the successor to the next version of Centrino; the forthcoming version of Centrino, called Santa Rosa, is set to hit the market next month.

ON THE MARK

HOT TECHNOLOGY TRENDS, NEW PRODUCT NEWS AND INDUSTRY BUZZ BY MARK HALL

MATTHEW FREEMAN

Search Giants Don't Wade . . .

. . . into the pool of online databases. "Databases are places where [online search engines] don't look," observes John Grace, CEO of Enth Inc. in Westmont, Ill. Pity, too. As Grace points out, databases have answers to questions, whereas search engines can only give you links to places that may or may not have what you're looking for. The problem with getting answers from online databases is that users need to create meaningful queries. But visitors to *www.enth.com* can use simple English-language questions ("Who hit the most home runs in 1963?"), and Enth's Dynamic SQL Generation feature automatically transforms them into SQL requests that databases understand. Today, the databases that Enth supports mostly revolve around sports — trivia buffs may get sore fingers from typing questions into Enth — but databases on demographics are also available. Grace says companies can use Enth to make their internal databases more accessible to workers who are unfamiliar with SQL query practices. But what he thinks might be more interesting is tying your internal databases with Enth's online ones for more complex searches. For example, he says, you could link your historical regional sales data with area population shifts to glean relationships. Grace doesn't see Enth as competition to Google Inc. or other search giants. For one thing, he acknowledges, "we can't answer most questions." For another, it takes time to prep the Dynamic SQL Generation tool for each online database. That said, the potential of using common text-string searches to query structured data is exciting. And worth watching.

25 Number of databases currently searchable by Enth.

Back up thousands of remote . . .

. . . sites with a 64-bit tool. Asigra Inc. in Toronto will release a 64-bit version of its Televaulting agentless backup software in Q3, according to Executive Vice President Eran Farajun. You'll need to run the software on a 64-bit x86 machine at the remote site as well as at the central backup repository. Farajun says the 32-bit version can back up as many as 400 sites to a single archive. When the 64-bit version ships, he estimates that number will jump to 10,000 sites. The upgrade, free to current users, starts at $11,250.

FARAJUN: Televaulting goes 64-bit.

Secure the perimeter . . .

. . . around your mail systems. Whether you run your mail servers on-premises or pay to have them hosted, Nate Gilmore says you should consider his company's new Perimeter Email Protection (PEP) service, which is available today. Gilmore, director of marketing at Concentric, a business unit of XO Communications Inc., claims that PEP protects your mail system from dictionary attacks and can "bounce all the crud" destined for users' mailboxes. Naturally, Concentric offers more than e-mail protection. Gilmore says you can get full e-mail, Web and application hosting services. And you can pay for just the resources you use. Concentric has devised a clever pricing system based on "resource units," which are calculated based on the number of Common Gateway Interface scripts and database calls your hosted software makes. Resource units come in bundles of 5,000 for $1, Gilmore says, estimating that a small business might consume 30,000 to 40,000 per month.

Protect your mail systems, GILMORE urges.

Give zero-day threats . . .

. . . zero chance of success. That's the intent of LANDesk Software Inc.'s Host Intrusion Protection (HIP) software, available May 9. Devin Anderson, business line manager at LANDesk in South Jordan, Utah, claims that HIP will stop aberrant application activity in its tracks. And that, he says, is the ideal way to shut down zero-day malware threats. Anderson says you get started by setting up representative PCs with their usual applications and running them in a production environment with HIP loaded. HIP is then able to determine how each app normally behaves. After a couple of weeks, he says, you can let HIP rip. Pricing is not yet set.

12 Number of zero-day vulnerabilities in second half of 2006, according to Symantec.

Talend has talent . . .

. . . for data integration. Open-source vendor Talend Inc. in Palo Alto, Calif., this week will release the 2.0 version of its Open Studio software. Yves de Montcheuil, vice president of marketing, hopes the free tool will help spread data integration capabilities "to companies of all sizes, even Joe's Garage down the street." He argues that even small businesses need to move data between their operations and their suppliers and customers. But before Talend, data integration technologies were far too pricey for most companies, de Montcheuil says. Open Studio 2.0 can now output Java code, as well as Perl scripts and SQL queries, from the graphical business-process modeler. And, says de Montcheuil, the new release doubles the number of connectors that come with the product to 100. ▸

Open source makes data integration affordable for all, says DE MONTCHEUIL.

BRIEFS

Man Pleads Guilty in Copyright Case

A Georgia man has pleaded guilty to distributing copyrighted materials over a peer-to-peer network, the U.S. Department of Justice said. Sam Kuonen, 24, of Columbus, is the fifth person convicted in a DOJ crackdown on the illegal distribution of software, games and music over peer-to-peer networks using BitTorrent Inc.'s file-sharing technology. Kuonen pleaded guilty to two charges and faces up to five years in prison and a $250,000 fine.

New Service to Help Build Rich Web Apps

Bungee Labs has unveiled a new on-demand service designed to help Web developers quickly build rich Internet applications and use its grid to host the applications. Bungee Connect reduces programming complexity and provides access to Web services APIs from companies such as Amazon.com Inc., eBay Inc., Google Inc., Microsoft Corp. and Salesforce.com Inc., Bungee said.

Symantec Unveils SaaS for Storage

Symantec Corp. has introduced a software-as-a-service offering designed to help small and midsize businesses with data backup and restoration of business tasks. The hosted offering includes BackUp Exec technology, which Symantec gained in its acquisition of Veritas Software. The company did not disclose pricing or a customer ship date.

Microsoft, Lenovo to Create R&D Center

Microsoft and Lenovo Group Ltd. have agreed to jointly create a technology center in Beijing to promote research and development of new consumer technology, particularly mobile devices. Microsoft will provide technical training support and share in the R&D efforts, and the two firms will share the intellectual property of co-developed projects.

Continued from page 1

BlackBerry

technology officer at Errata Security LLC in Atlanta, sharply criticized RIM for its initial silence about the outage.

"I'm actually really mad about it," Maynor said on Wednesday. "I'm mad enough to switch to another service. Everyone makes mistakes, but [RIM's] cardinal sin is that they didn't inform their users."

Maynor, who has been a BlackBerry user for the past three years, said he lost his service from about 8:30 p.m. EDT last Tuesday until 10:30 a.m. Wednesday. He added that he couldn't get information about the outage from the BlackBerry Web site or his telecommunications carrier. Instead, he turned to online discussion forums.

The BlackBerry outage affected users for about 12 hours.

John D. Halamka, CIO at both CareGroup HealthCare System and Harvard Medical School in Boston, said Friday that he was satisfied with RIM's explanation and apology. But he said he hopes that in the future, the vendor will be "more proactive about acknowledging problems and communicating with their customers." Halamka pointed out that as of Friday morning, RIM's BlackBerry and corporate Web sites still had no information about the outage.

Earlier in the week, Halamka said that about 500 of his users lost BlackBerry service for 11 hours starting at 8 p.m. EDT Tuesday. The users were able to switch to cell phones and Web-based e-mail during the outage, so they could continue to function at work, according to Halamka.

But, he added, CareGroup's BlackBerry user base "includes many clinicians who use the devices as part of patient care and need to ensure [the devices'] security and reliability. If the downtime was caused by an external security breach or an internal problem with change control [at RIM], we need to know about it."

In its brief initial statement, RIM said that a "service interruption" had affected e-mail deliveries to users in North America starting Tuesday evening but that service for most customers had been restored overnight. Phone calls made on the BlackBerry handsets weren't affected, it said.

RIM issued another short statement Thursday afternoon, saying it was still analyzing the cause of the outage. Finally, later that night, the company pointed to the installation of a cache optimization program on a server that powers the BlackBerry service. Testing of the software "proved to be insufficient," RIM said, adding that the installation "triggered a compounding of interaction errors between the system's operational database and cache." The company's IT staff was able to isolate the problem but couldn't fix it.

> **"I'm mad enough to switch to another service. Everyone makes mistakes, but [RIM's] cardinal sin is that they didn't inform their users.**
>
> DAVID MAYNOR, BLACKBERRY USER AND CTO, ERRATA SECURITY LLC

And then, RIM said, a fail-over process that had been tested repeatedly didn't work as expected.

The company added that it plans to bolster some of its testing, monitoring and recovery processes in an effort to prevent repeat episodes.

RIM officials couldn't be reached for further comment on any of the statements, despite repeated attempts via phone calls and e-mail.

Jack Gold, an analyst at J. Gold Associates LLC in Northboro, Mass., said RIM could have kept customers better informed during and after the outage. "Nothing's worse than not knowing what's happening when a problem occurs," he noted. But Gold said he doesn't think either the disruption or the slow release of information was "a major failing."

The outage's one saving grace was that e-mail service was primarily affected at night rather than during the busiest business hours, said Frank Gillman, director of technology at Allen Matkins Leck Gamble Mallory & Natsis LLP. The Los Angeles law firm has about 320 BlackBerry users, and Gillman said people who were at work shifted to Web mail portals to monitor inbound messages from clients.

"I think it goes to show how dependent the business world has become on instant e-mail access via the BlackBerry," Gillman said. He added that as a result of the outage, he is considering buying a BlackBerry troubleshooting tool developed by Zenprise Inc.

"Being a CTO, I understand the reality that there will be technical problems every so often," Gillman said. "What concerns me more as a customer is that my vendor acknowledge the problem fairly quickly and aggressively and, more importantly, tell me the internal changes they plan on making to ensure such a problem does not repeat itself."

Todd R. Weiss of Computerworld *and reporters from the IDG News Service contributed to this story.*

Crisis Consultants Differ on RIM's Handling of Outage

ONE CRISIS MANAGEMENT consultant said last week that customers expect more details in outage situations than Research In Motion disclosed during and immediately after its BlackBerry e-mail service was interrupted.

"The general rule is, if it's really bad, get [some information] out fast," said James Lukaszewski, CEO of The Lukaszewski Group Inc. in White Plains, N.Y. "It would be a far less large situation if they communicated more."

That can be a challenge if a company doesn't know exactly what is happening, Lukaszewski acknowledged. But, he said, just informing customers about the steps that are being taken to correct a problem and when it might be resolved is better than saying nothing at all.

"Customers want information – they want to know what's going on," he said. "They expect reputable companies to communicate."

However, Mark Towhey, president of Towhey Consulting Group Inc. in Toronto, offered a different viewpoint. Towhey, whose company also provides crisis management advice to corporate clients, said he thought RIM's response was appropriate given the circumstances.

If the company didn't know whether "something broke" or its network was attacked, saying little might have been the best approach, said Towhey. "In either case, they don't want to sound like they don't know what they're doing," he said.

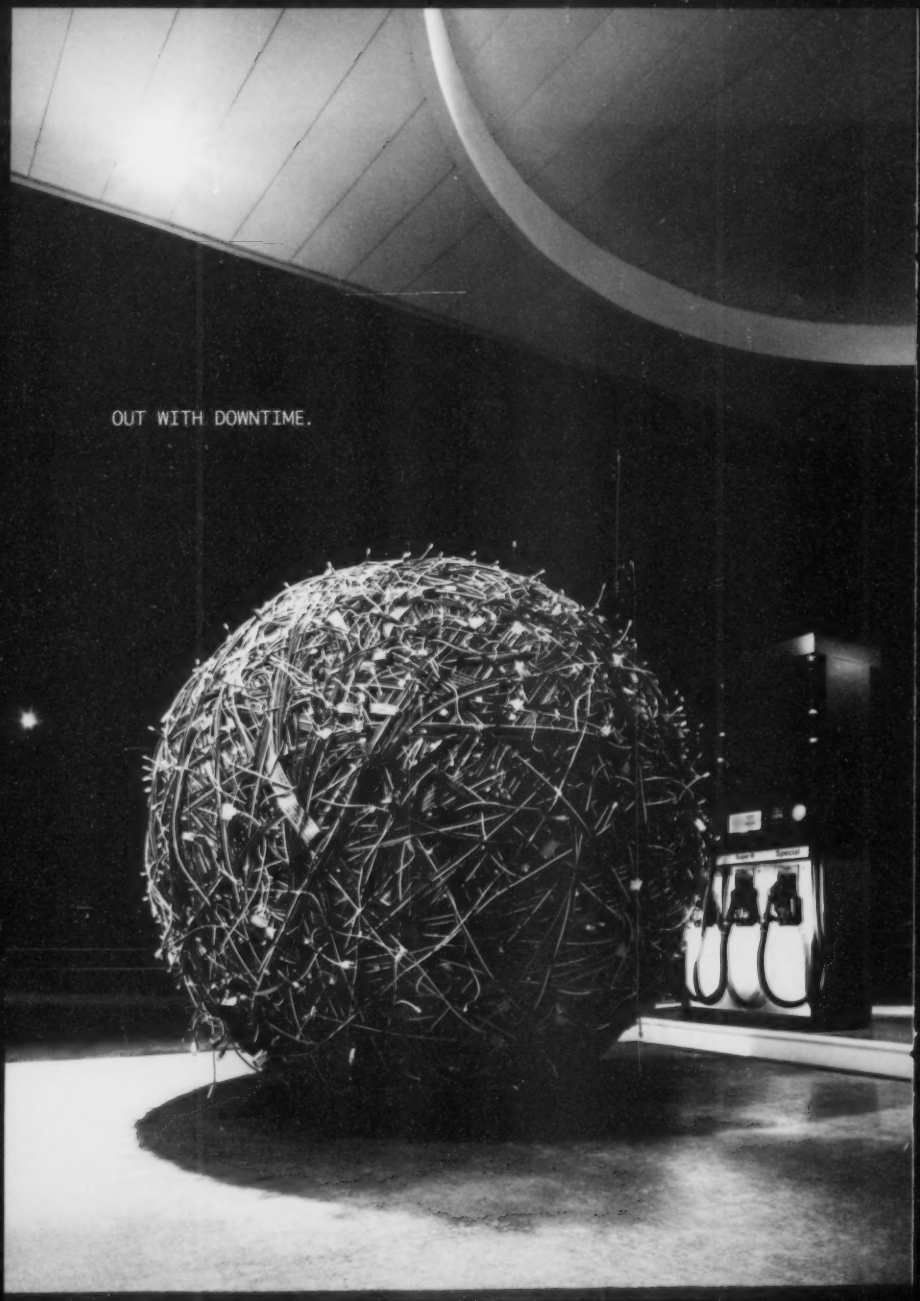
A BlackBerry customer himself, Towhey said he learned of the e-mail outage when he read news reports about it Wednesday morning. About an hour later, the service was working again. "For me as a customer, it seems like a minor hiccup," he said.

The deep devotion that so many users have to their BlackBerry devices will likely help RIM avoid a big backlash, said Jeff Kagan, an independent telecommunications analyst in Marietta, Ga. "BlackBerry will take a hit, but it will probably come back because the users are almost rabid," Kagan said. "The bottom line is, after the next few weeks, we will all go back to trusting it again – until the next disaster."

– NANCY WEIL, GRANT GROSS AND ROBERT McMILLAN OF THE IDG NEWS SERVICE

OUT WITH COMPLEXITY.

OUT WITH DOWNTIME.



OUT WITH HYPERVENTILATING CIOs.

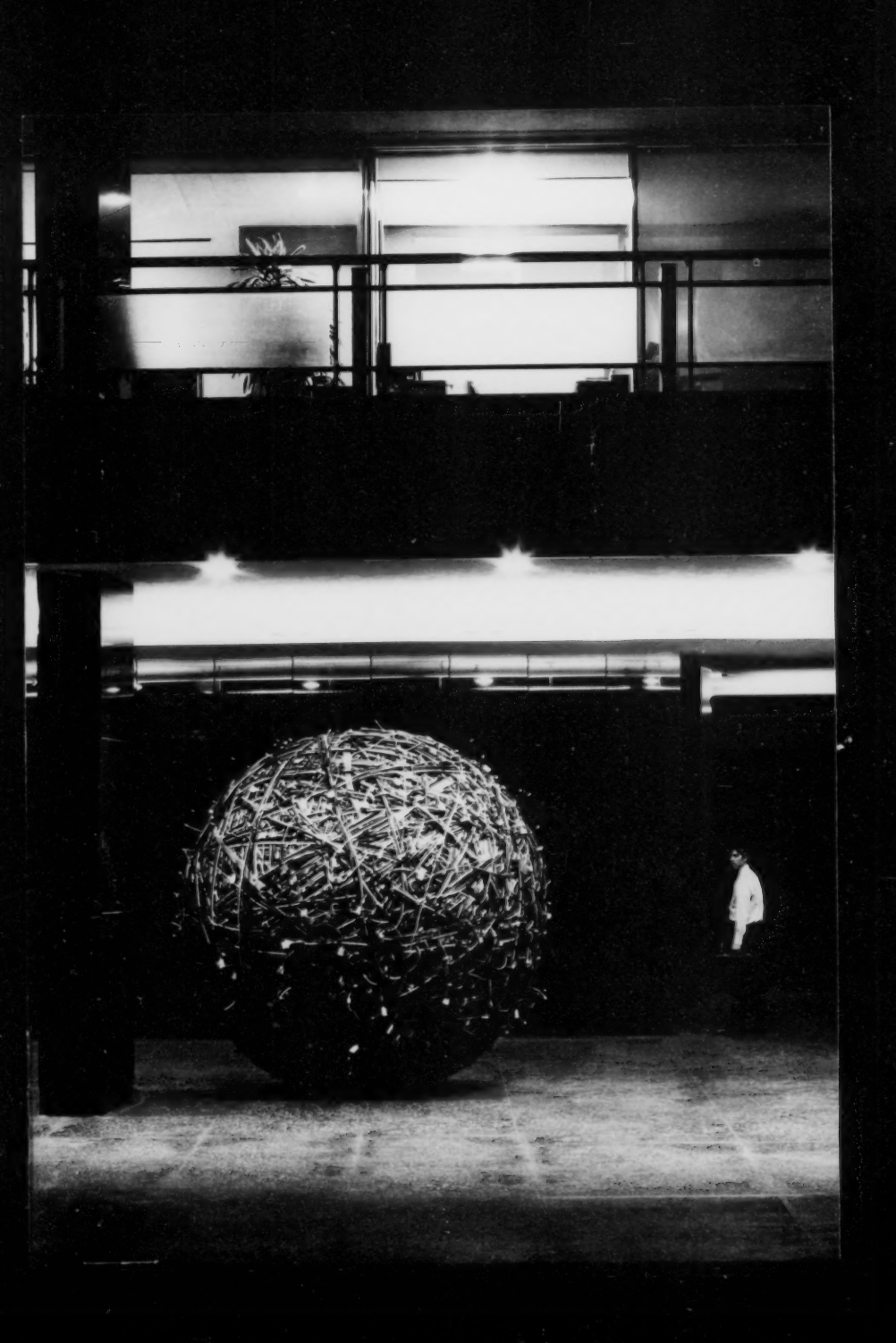
OUT WITH INEFFICIENCY.
OUT WITH INFLEXIBILITY.

2

OUT WITH CAFFEINE-GENERATED HYSTERIA.

OUT WITH FINGER-POINTING.

OUT WITH CABLES.



IN WITH BLADES.

[1]Comparing the IBM BladeCenter HS21 Intel Xeon processor-based blade to the HP BladeSystem c-Class Intel Xeon processor-based blade (BL460c), the IBM HS21 uses up to 19% less energy. Power figures based on testing performance on November 14, 2006, the number quoted is the average power difference idle through full load. Each server tested with two 2.66GHz dual-core Intel Xeon processors, 16GB of memory, dual Ethernet controllers, and one 36GB SAS HDD. [2]HP offers 1Gb Ethernet and 4Gb Fibre Channel only. IBM, the IBM logo, BladeCenter, and Take Back Control are trademarks or registered trademarks of International Business Machines Corporation in the United States and/or other countries. Intel, Intel Inside, the Intel Inside logo, and Intel Xeon are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and/or other countries. Other company, product and service names may be trademarks or service marks of others. © 2007 IBM Corporation. All rights reserved.

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E-mail Alerts May Not Be Best Bet in Emergencies

Shootings at Va. Tech point to need for broader notification systems, users say

BY TODD R. WEISS

In emergencies such as last Monday's shooting rampage at Virginia Tech, sending warnings via e-mail may not be enough to inform people of what's happening so they can find shelter, evacuate or take other protective actions.

Emergency notification systems that can push messages to cell or land-line phones, fax machines and other devices in addition to e-mail addresses have become part of the IT infrastructure at organizations such as Eckerd College in St. Petersburg, Fla.

Casey Paquet, Eckerd's Web manager, said the college deployed MessageOne Inc.'s AlertFind notification system a year ago in an effort to better protect its 2,200 students, faculty and staff members in case of hurricanes or other weather emergencies. AlertFind enables the school to instantly send out voice or text messages to devices such as cell phones, Paquet said.

During a crisis, just sending e-mail messages "is not going to work," Paquet said. "It's not fast enough." He added that text messaging "is essentially an instant way to tell people there's a problem."

At Eckerd, students can't opt out of having their phone numbers stored in the AlertFind database, although they can choose not to receive nonemergency messages. Paquet said the school now is collecting the cell phone numbers of parents so that they can also get calls or text messages via AlertFind, which has yet to be used in an actual emergency.

At Virginia Tech, a gunman, later identified as 23-year-old senior Cho Seung-Hui, is believed to have killed two students in a dormitory and 30 people in an academic building before shooting himself.

Officials at the Blacksburg-based school — formally known as Virginia Polytechnic Institute and State University — sent a campuswide e-mail about the dormitory shootings at about 9:30 a.m. last Monday. That was more than two hours after that incident, and just 15 minutes before campus police received a 911 call reporting the additional shootings.

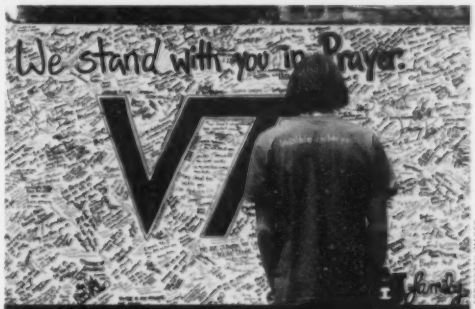
Susan Trulove, a public relations staff member at Virginia Tech, said the school sent text messages to students and faculty members at the same time it distributed the e-mail notifications. But the text messages were received only by people who had signed up to get them, according to Trulove.

Virginia Tech also used a public address system to advise people on campus to stay inside buildings, Trulove said. Other means of communication, including automated calls to land-line phones, were used, she added.

Robert Noyed, director of communications at the Wayzata Public School District in Wayzata, Minn., said that the district has been using Minneapolis-based Avtex Inc.'s CityWide Alert Notification System for the past two years.

The system, which is typically used in bad weather that might cause early dismissals or if there is a problem at a particular school, sends messages to the phones of parents who have chosen to participate. "It was an opportunity to better connect with our families," Noyed said.

Paul Darcy, vice president of marketing at Austin-based MessageOne, said that a typical AlertFind deployment costs about $40,000 annually for 40,000 users. The system is managed and set up off-site in remote data centers operated by partner companies.



A Virginia Tech student reads messages written on a memorial for the victims of last Monday's shootings at the university.

Bob Poe, president of Emergency Communications Network Inc. in Ormond Beach, Fla., said his company's CodeRed notification system costs $15,000 to $20,000 annually for 40,000 users.

Notification systems that tie in to phones are much more effective than e-mail alerts, Poe claimed. "The phone is the last alarm anybody has," he said. "And they answer it."

Ace Hardware Replaces BI Tools After Early Struggles

BY HEATHER HAVENSTEIN

Ace Hardware Corp. workers this month will begin using new enterprise reporting software in a project that could eventually be used by some 10,000 partners, suppliers, customers and internal users.

The Oak Brook, Ill.-based hardware store chain plans to replace its current business intelligence (BI) tool, which it declined to identify, with the WebFocus reporting software from New York-based Information Builders Inc.

Ace's developers have been working with WebFocus for about four months and will begin rolling it out by the end of April. Officials said the company decided to replace its current BI software because its developers have found it too difficult to use.

Brian Cook, a software engineering consultant at Ace, said the programming model for the old tool was too rigid and led to several internal failures.

"People were getting tied in knots trying to develop reports in that tool," he said. "The tool was very rigid and had a lot of requirements as far as the way you did reporting. There was one way to do development, and you had to figure it out."

Ace Hardware plans to replace its current business intelligence tool with the WebFocus reporting software.

Last year, Ace evaluated tools from several vendors, including Business Objects SA, Cognos Inc., Hyperion Solutions Corp. and Microsoft Corp., but none was flexible enough for its developers, Cook said.

Ace tapped WebFocus for its flexibility and strong integration with Microsoft Excel — even stronger than Microsoft's own reporting tools, Cook contended.

The Excel integration was important because it allows developers to "embed formulas, and users [to] manipulate data. Excel is an interface users are familiar with," he said.

By the end of this month, Ace plans to begin rolling the WebFocus tool out to the 3,000 employees who are using the older tool, Cook said. Eventually, he added, as many as 10,000 internal users, customers, partners and suppliers may be added to the WebFocus system.

Some of the new users will include personnel at the company's 5,000 stores, where only point-of-sale data and limited inventory data can now be rolled up and presented to the corporate office, Cook said.

The migration won't be without challenges, he acknowledged. The biggest, he said, may be to convince users of the current system that the new one will work as promised.

"The system as a whole in the past has gotten a bad rap [because] we were unable to deliver on some projects and had some high-profile failures," Cook said. "Building confidence that this system can deliver is the biggest challenge."

Wayne Eckerson, director of research at The Data Warehousing Institute, agreed that winning back users who have been burned in previous BI projects is a difficult task.

He suggested that companies should let a true cross section of users select BI tools instead of "the most outspoken users, who tend to be power users" and likely will select tools that are too complex for most users.

GLOBAL DISPATCHES An International IT News Digest

Worm Hits Users of Skype VoIP System

LONDON

A WORM TARGETING Skype Technologies S.A.'s voice-over-IP application is harvesting e-mail addresses and directing users to a range of sites hosting malicious software, security vendors said last week.

According to Helsinki, Finland-based F-Secure Corp., infected Skype machines are sending malicious links via instant message to the contact lists of users. The link leads to an executable file that downloads a Trojan horse capable of downloading other malicious software, F-Secure said.

The link also directs users to at least eight Web sites with information about Africa. Some of those sites have advertising, indicating that those links may be part of a so-called click-fraud scam to get users to unknowingly click on online advertisements, said Graham Cluley, senior technology consultant at Sophos PLC, a security vendor in Abingdon, England.

Cluley compared the latest incident with past worms targeting Skype, none of which have inflicted great damage. "I would think this thing isn't likely to spread terribly far and wide," he said.

■ JEREMY KIRK, IDG NEWS SERVICE

U.K. Health Service Suspends IT Pact

LONDON

THE U.K. Department of Health has suspended a five-year contract awarded to Paris-based IT services firm Atos Origin SA to supply diagnostic scanning, pending a review after technical problems forced 900 patients to be retested.

A pilot magnetic resonance imaging and ultrasound scanning service in northwest England that Atos had been running since December was to be expanded this month to include bone density and computerized tomography scanning.

However, the plan was postponed after the 900 patients referred for ultrasound scans had to be rescanned when an audit revealed administrative and technical problems with the program.

In a statement, National Health Service North West said concerns were raised in mid-February when a clinical audit found that some patient information was not being correctly recorded.

"Starting the service early in a limited way has helped flush out these operational issues," said Mike Farrar, chief executive of NHS North West in Manchester, England. "We want to assure ourselves and the public that the additional services are safe and of the highest quality."

Atos Origin said it is working with the country's health department to clear up any issues and to restart the program.

■ TASH SHIFRIN, COMPUTERWORLD U.K.

Microsoft Sees China's Piracy Record Improve

TOKYO

MICROSOFT CORP. is seeing some improvement in China's software piracy problems, the company's top lawyer said at a press conference here this month.

"The last year has been the most important and encouraging year for software protection under the copyright law in China," said Brad Smith, senior vice president and general counsel at Microsoft.

"We're starting to see new PCs in China delivered to customers with legitimate software installed," he said. "We're starting to see more enterprises and government ministries purchase legitimate software."

According to the Business Software Alliance, an industry group of which Microsoft is a member, software firms lost $3.9 billion (U.S.) in China in 2005.

Smith said that Chinese companies must continue working to improve the piracy record. "There will need to be a continuing focus on the improvement in copyright protection and reduction in piracy levels," he said.

Smith's comments came just days after the U.S. government announced plans to file a complaints against China with the World Trade Organization for being lax in enforcing copyright laws.

■ MARTYN WILLIAMS, IDG NEWS SERVICE

GLOBAL FACT

$1.3B

Australian ($1.1 billion U.S.)

Projected size of the market for security software in Australia in 2010, up from $850 million Australian ($709 million U.S.) last year.

SOURCE: IDC

IBM, Indian Group to Offer Hosted Apps

CHENNAI, INDIA

IBM and Apollo Hospitals Group, a large hospital chain here, have agreed to jointly create hosted applications for midsize hospitals in India.

Mohammed H. Naseem, vice president for health care at IBM India, said the market for such applications could total at least $300 million (U.S.) over the next five years. Naseem said the agreement calls for IBM to supply the system's hardware, middleware and services infrastructure, while Apollo will provide its health care domain expertise. The products will be sold by Apollo and independent software vendors, he added.

The initiative, called Health Hiway, targets Indian hospitals, physician practices, pharmacies and third-party administrators who can benefit from services that require minimal investment, Naseem said.

The hosted system would eliminate the need for health care operations to create complex IT infrastructures, he noted. The hosted applications will include ERP systems and revenue management products, Naseem said.

■ JOHN RIBEIRO, IDG NEWS SERVICE

AT&T Ends Talks for Telecom Italia Stake

MILAN, ITALY

AT&T INC. has halted negotiations to buy a one-third stake in Olimpia SpA, a holding company based here that owns about 18% of Telecom Italia SpA.

In a statement last week, AT&T, which announced early this month that it had begun negotiating to buy Olimpia, said it has decided not to pursue the matter further. The company did not say why it is withdrawing from discussions. América Móvil SA, a Colonia Anahuac, Mexico-based telecommunications carrier, said it will continue negotiations to buy a one-third stake in Olimpia.

Mike Cansfield, an analyst at Ovum Ltd. in London, said that concerns in Italy about foreign ownership of Telecom Italia appear to have scuttled the AT&T deal. Local unions had protested the talks, he noted.

"AT&T, not unreasonably, sees this proposed investment as too risky," Cansfield said. "América Móvil has not followed suit, although it would be a surprise to us if this did not happen."

■ GRANT GROSS, IDG NEWS SERVICE

Compiled by Mike Bucken.

Briefly Noted

Visa International has confirmed problems with transaction processing across Europe. The credit card firm blamed the April 13 event on "some technical problems in our card transaction processing" and noted that full service quickly resumed. About 4,500 member banks have issued more than 315 million Visa credit cards in Europe.

■ TASH SHIFRIN, COMPUTERWORLD U.K.

The Australian Department of Foreign Affairs and Trade has awarded a $5.9 million Australian ($4.9 million U.S.) to UXC Ltd. to deploy a Consular Assistance Information System in Canberra. The Melbourne-based consulting firm will deploy the system to more than 130 Australian embassies and consular posts. UXC will build the system using Microsoft .Net 3, BizTalk, SharePoint and SQL Server Replication Services technologies.

■ SANDRA ROSSI, COMPUTERWORLD AUSTRALIA

Infosys Technologies Ltd. has projected that its revenue will grow by about 30% in the fiscal year ending March 28, 2008. The Bangalore, India-based outsourcer also reported that sales rose 44% to $3.1 billion (U.S.) in the year that ended March 31. Infosys added 19,526 employees during the year that ended March 31, increasing its total workforce to 72,241.

■ JOHN RIBEIRO, IDG NEWS SERVICE

An air conditioning failure forced HM Revenue & Customs in London to shut down its computer systems earlier this month, disrupting online services. A spokesman for the U.K. tax collections agency confirmed that the system was shut down on April 10 but noted that services were working normally within a day.

■ TASH SHIFRIN, COMPUTERWORLD U.K.

The state government of Victoria, Australia, has awarded Mincom Ltd. a contract to provide asset management software. The deal extends a contract under which the Brisbane, Australia-based vendor provides its applications to the Victoria Department of Justice. The Victoria Department of Sustainability and Environment was the first agency to sign up for the latest version of Mincom Ellipse under the new pact.

■ SANDRA ROSSI, COMPUTERWORLD AUSTRALIA

SOFTWARE APPLICATION INFORMATION

COMPANY: [redacted]
TYPE OF BUSINESS: Telecommunications
TYPE OF APPLICATION: IMS / Triple Play
PRODUCT NAME: [redacted] 2.0
DEPLOYED SINCE: August 2006
LARGE DATA SETS: XX YES NO
COMPLEX DATA MODEL: XX YES NO
DATABASE SIZE (APPROX.): 2,3 TB
PROGRAMMING LANGUAGE: X JAVA C++ .NET

CONTACT / PERSON IN CHARGE OF DATABASE

NAME: Peter [redacted]
PHONE: +353 [redacted]
E-MAIL: p[redacted]om
ROLE: Software Architect, Tech Lead Persistenc[redacted]
I AGREE ON UNDISGUISED USAGE OF THE DETAILS IN THIS FORM IN AN ADVERTISEMENT: NO! YES
DATE / SIGN:

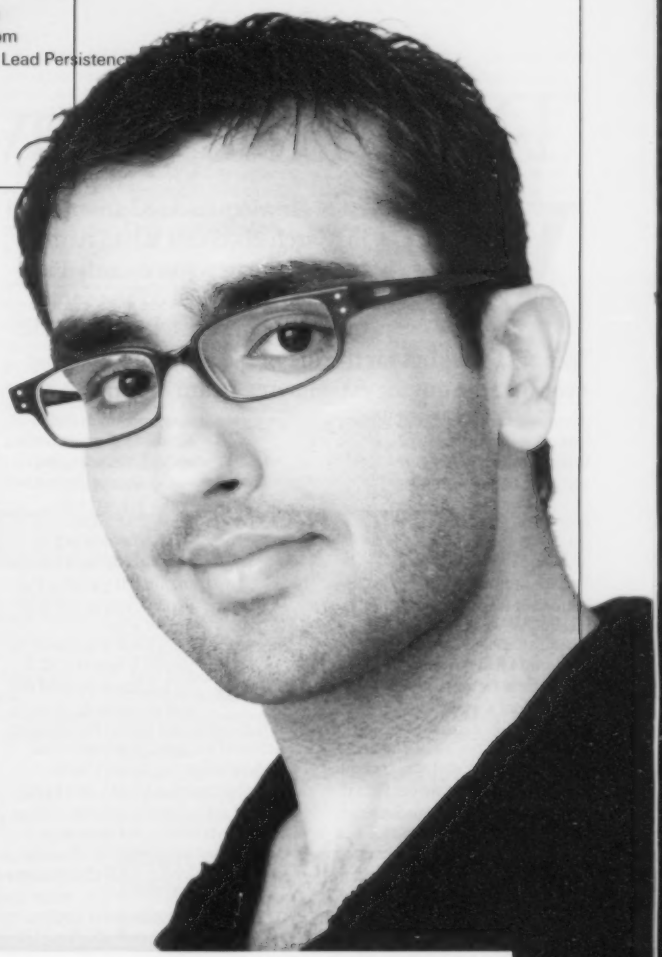
NO. 021071

DATABASE SATISFACTION REPORT

VENDOR: Versant
PRODUCT: Versant Object Database
VERSION: 7.0.1.2
ADD-ON MODULES: Vitness, Fault Tolerant Server
LEVEL OF SUPPORT: 24/7 Support

	POOR	FAIR	VERY GOOD	EXCELLENT
PERFORMANCE	☐	☐	☐	☒
AVAILABILITY	☐	☐	☐	☒!
SCALABILITY	☐	☐	☐	☒
SUPPORT SERVICES	☐	☐	☐	☒

NO. 021071



VERSANT Object Database

The majority of Versant's customers are not open to publicly talking about the use of the Versant Object Database in their software solutions. There's a very good reason for this: Their competitive advantage. Using the Versant Object Database – instead of traditional relational database systems – enables our customers to develop software solutions with a strong competitive advantage, particularly in applications that have high availability requirements and large data sets that use complex C++ or Java object models. Besides high-performance database technology, Versant provides enterprise-grade add-on modules – for example:

Witness

Versant Vitness, an add-on module for advanced database monitoring, enables real-time, pro-active monitoring of your entire Versant Object Database environment. Therefore the SOA-ready Vitness module delivers the extra reliability and control required in High Availability environments.

www.versant.com

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DON TENNANT

Dormant Convictions

WHEN Hewlett-Packard announced in March 2005 that it had named Mark Hurd to replace Carly Fiorina as its CEO, I asked the same question I'm sure a lot of you did: "Who?" I couldn't for the life of me remember having ever met the guy, or even having heard of him. So it came as a surprise when I was reminded recently that not only have I met him, but darned if I haven't interviewed him, too.

DON TENNANT is editor in chief of *Computerworld*. Contact him at **don_tennant@computerworld.com.**

I was doing some research in the IDG News Service archives for the editorial I was writing a couple of weeks ago, when I stumbled across a column I had written way back in October 1997. It was about a worldwide strategic alliance that had been announced between NCR and SAS Institute. I recall that I was intrigued by the announcement, because it came in the wake of a technology partnership that NCR had formed with database vendor Informix a year earlier that had already died an inglorious death.

The NCR executives I spoke with at the time were remarkably straightforward about the Informix bungle. One of them said the Informix alliance was "kind of the poster child of how not to do a partnership." And none of them was more candid than Hurd, who was vice president of marketing in NCR's computer systems group. Hurd went so far as to tell me that the Informix blunder was hardly an aberration.

"Our history, like many others, is that there's no shortage of good ideas in conference rooms, but when you get them out in front of the customer, they tend to see them break down," he said. He spoke equally straightforwardly about how essential it is to provide the resources that are needed to ensure success.

"Typically, the reason the breakdown occurs is the resource map never lives up to the expectation — you always kind of under-resource the model," Hurd told me. "We've taken the SAS relationship on with that in mind. If you're going to do it, you've got to go all the way."

I'll leave it to others to research how the NCR-SAS alliance panned out and to assess its success. What's pertinent here is Hurd's openness and his staunch position that under-resourcing doesn't work.

Fast-forward a decade, and I find myself asking more questions: What happened? Where did that candor and resolve go? What is it about becoming a celebrity CEO that changes a person?

Since the company held its HP Technology Forum last September, I've written fairly extensively about Hurd's actions — and inaction — on several fronts, and I'm struck by how little they resemble what I encountered in 1997.

I've written about Hurd's failure to demonstrate candor in addressing the boardroom leak fiasco directly with users. And I've written about his failure to provide his customers with adequate service and support resources due in large part to his decision to outsource so much of HP's support portfolio to India, China and Costa Rica, and his failure to adequately train the technicians in those countries. Could this be the same Mark Hurd who, as a relatively unknown NCR vice president of marketing, spoke of the foolishness of under-resourcing?

HP is now working feverishly to prepare for the HP Technology Forum & Expo 2007, to be held in Las Vegas in June. Hurd is slated to speak at the event, as he did last year. Let's hope that this time, he's able to demonstrate that the convictions he held a decade ago have been dormant rather than dead, and that they've finally been awakened. ◗

Don Tennant

JOHN D. HALAMKA

The Dark Side of Going Public

OVER THE past 10 years in my CIO role, I've been customer and counselor to many technology companies, some public and some private. Although all companies are different and each has its own story, there are a few trends I've seen in public technology companies that make me think private firms have special appeal.

1. Ronco sales tactics on the last day of the quarter. Pressures to meet quarterly numbers and stock analysts' expectations force salespeople to go to extremes to close sales. "Buy our new gizmo today, and we'll discount it 50% as well as include a set of free Ginsu knives." As a CIO, I refuse to jump at such end-of-quarter blowout deals. My experience is that today's once-in-a-lifetime deals will be there again on the last day of the next quarter. This kind of sales behavior mortgages the future of the vendor company by creating less profitable deals in the short term that may hurt the company in the long term, generally after the salesperson has left.

JOHN D. HALAMKA is CIO at CareGroup Healthcare System, CIO and associate dean for educational technology at Harvard Medical School, chairman of the New England Health Electronic Data Interchange Network, CIO of the Harvard Clinical Research Institute and a practicing emergency physician. Contact him at **jhalamka@caregroup.harvard.edu.**

2. Obsession with stock options. Employees want to be millionaires, and options seem to be a shortcut to easy street. But that mindset forces the CEO and HR to spend an incredible amount of time developing options policies, strategizing to retain valuable employees with options, and updating the board and the compensation committee on options issues. Such efforts distract the CEO from focusing on the company's products and services. Admittedly, options allow companies to attract top-notch talent, but setting the expectation that millions

can be made through options in a year or two leaves everyone less interested in building an organization for the long term through product innovation and customer service.

3. The crushing burden of Sarbanes-Oxley. I've seen public companies and those about to go public spend millions on Sarbanes-Oxley compliance. Sure, Enron and WorldCom were inexcusable examples of corporate greed. But Sarbanes-Oxley's impact on honest, growing new companies is so extreme that dollars need to be taken from R&D and applied to people and systems, with no other purpose than meeting the act's requirements. With fewer R&D resources, companies innovate more slowly, to the detriment of all.

4. Focus on the shareholders and stock price. Some very odd behaviors are motivated by stock price. "Let's do a merger to create visibility and enhance the stock price." "Let's announce a new product before it's ready, to generate buzz." The result is that marketing departments are a year ahead of engineering departments. Customer service is outsourced to enhance profitability rather than build long-term, successful relationships. Product quality is less important than mergers and acquisitions.

5. Cozy board relations. As a leader in IT, I am evaluated by the quality of my service, the success of my projects and the satisfaction of my employees. Wouldn't it be great if, instead of garnering rewards as a function of share price, CEOs could present their boards with product innovations, employee feedback and customer loyalty metrics and be rewarded for success?

I know that it sounds naive to believe that CEOs and employees would be satisfied by the wages and bonuses generated by excellent products and services. Or that CEO salaries might be limited to just 25 to 50 times the average employee wage and transparently computed based on performance metrics rather than on multimillion-dollar options gains. Or that companies could be built to last decades rather than just for the boom-and-bust cycle of growth, IPO and decline.

In my field, health care IT, a few very strong private vendors, such as Epic Systems and Meditech, are product- and customer-driven. They have thousands of engineers and dozens of salespeople. They gain market share over time because of their acute responsiveness to customer needs. Their customers dictate their growth rates, salaries and strategies.

I realize that the public markets give companies the capital they need to expand and that many companies have large start-up costs that require substantial external investment. However, as an IT customer, I often wish that my needs were the most important driver to the board, CEO and employees of the nation's IT companies. My advice to new IT businesses: Consider staying private — your customers will thank you.

As one CEO of a major private IT company commented, "I don't see how you can spend so much of your life building a company and then let people who don't care about it beyond their returns be the owners of it. Sort of like raising your kid so you can sell her."

WANT OUR OPINION?

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www.computerworld.com/columns

READERS' LETTERS

Apple vs. Microsoft Still Stirring Things Up

APPLE HAS made a strategically astute move at the same time that Microsoft has made a strategic blunder ["Why Microsoft Should Fear Apple," *Computerworld.com*, March 28]. Vista offers enterprise users nothing superior to Windows XP Pro and raises total cost of ownership because of the hardware resources needed to run Vista.

Meanwhile, Apple has removed the hardware hurdle for Mac OS use. Users may be ready to try Mac on their existing hardware rather than invest big in a hardware upgrade that does not bring anything they really need.

Bruce E. Hogman
Senior information specialist, Fort Lauderdale, Fla., brucehogman@comcast.net

THIS WAS a provocative, timely and insightful article, but though Scot Finnie's comments about the enterprise wanting and, in some cases, insisting on an economy Mac are well taken, it most likely won't happen. Steve Jobs has established a culture at Apple that is devoted to building the best computers in the world, computers where Apple can uniquely add value. That means that every Mac has to be the best in terms of form, function and user experience, and every Mac must be able to fully exploit the capabilities and features of Mac OS X.

Also, under Jobs, Apple has relentlessly pursued the reduction and rationalizing of its products to save costs and avoid the production of redundant and duplicative hardware and software. Apple will not accommodate the enterprise where that means violating the principles of its culture. Where accommodation to the enterprise is consistent with Apple's principles, Apple will manufacture any profitable piece of software and/or hardware for the enterprise.

An economy Mac would not only be inconsistent with Apple's principles, but it would also be unprofitable and would result in the costly production of redundant computers. Enterprise customers who want less expensive Macs must be satisfied with the MacBook and the Mac Mini, or they must go with Wintel.

Orlando Smith
Attorney, Cleveland

I HEAR WHAT you're saying. Apple is getting less expensive, and Macs have fewer problems. However, the only reason these things have occurred is that Microsoft and its software exist. Without the competition from Microsoft, Apple's software and hardware costs would skyrocket, support would suffer, innovation would plummet, and you'd be stuck with a very closed system.

Thomas Mattaliano
Budget supervisor/area LAN manager, New Jersey Division of Family Development, Hamilton, thomas.mattaliano@dhs.state.nj.us

I THINK FINNIE is right, but Apple's advertising people need to get their act together if they want business people to see Apple's advantages. The ads are cute, but Apple needs to say that it has the most powerful machine available, not the cutest one.

Tom Mahoney
Network manager, Franklin & Marshall College, Lititz, Pa.

The Data Avalanche

THE IDC REPORT has been widely misinterpreted, which is their fault for poor phrasing ["Numbers Game," Frankly Speaking, March 12]. What they should have said is that (according to their calculations) the amount of data created *per year* is greater than the available storage capacity. Big deal. That would be a problem if all data were being kept for a year. But much digital data is thrown away quickly or never recorded at all (e.g., phone calls – we hope), so it takes little or no storage space.

Almost everyone has interpreted the report's numbers to mean "we are running out of space," but it does not mean that at all.

As far as the actual validity of their numbers, we are gearing up to do a study of this using more open and replicable methods (*http://ISIC.ucsd.edu*).

Roger Bohn
Professor, University of California, San Diego, Rbohn@ucsd.edu

Monitoring Monitors' Energy Costs

I RECENTLY COMPLETED an energy savings proposal ["Electric Bill for Multiple Monitors Isn't Likely to Break the Bank," *Computerworld.com*, March 19]. I used the "Kill a Watt" measuring device to determine the number of kilowatt-hours an 18-in. flat-panel monitor consumed. To my surprise, it was 46 watts per hour. This is just 10 watts less than most CRTs. When you do the math, using the cheapest kilowatt-hour available in Dallas for individuals ($0.123), you get $49.56 annually. We concluded that with 4,880 computers, $241,852.80 per year *does* break the bank. We will be launching an energy-saving campaign soon to encourage users to turn their monitors off when not in use. The savings from monitors alone would be over $150,000 annually if every user complies. And this can be enforced through Active Directory if the computers log onto a domain.

John Blank
PC consultant, Southern Methodist University, Dallas, Jablank@hotpop.com

Kill the Buzzword

HOW IS this ["Open-source . . . Hardware? Someday, Say ETech Attendees," *Computerworld.com*, Feb. 16] "open source"? These are terrific examples of innovation in design and manufacturing processes, and I really liked the article. But the use of the buzzword "open source" here elevates it to new levels of meaninglessness – like seeing the term "natural" on food labels.

Charles Savage
Vice president of IT, Atkinson-Baker Inc., Glendale, Calif., csavage@depo.com

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STRATEGIES & TACTICS

Inside 04.23.07

Where Does the Time Go? Endless meetings to attend, e-mail to deal with and fires to be doused. That's the daily grind for CIOs. Here's a look at how four IT leaders do it all and still have lives. **PAGE 20**

Q&A: Marshall Goldsmith **PAGE 22**

Career Watch **PAGE 24**

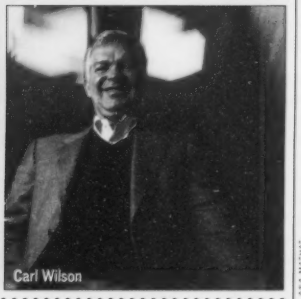
Security Manager's Journal **PAGE 27**

Opinion: Paul Ingevaldson **PAGE 28**

Dennis L'Heureux

Frank Modruson

Jean Holley


Carl Wilson

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Change Agents

CIOs have always been about [redacted], and nowhere is that clearer than in the [redacted] of their own roles.

"I CAN REMEMBER when CIOs wore short-sleeved shirts and pocket protectors and didn't have any status in the company," says Cathy Hotka, who was vice president of IT at the National Retail Federation from 1995 to 2002.

Those days are long gone. "Now, the CIO truly is part of the business," says Hotka. CIOs are "well regarded as senior influencers and are often the primary change agent for the company," she adds.

From data processing manager to CIO, from order-taker to strategic adviser, from cost-center spender to enterprise change agent, the role of the IT chief certainly has changed since the CIO title first came into vogue about 20 years ago.

As CIOs have delivered more value to their organizations, they've earned their place in the executive suite. But getting there is only half the challenge. It's what happens next that matters, as Tellabs Inc.'s Jean Holley can attest.

When Holley joined the Naperville, Ill.-based communications equipment provider as CIO nearly three years ago, she reported to the executive vice president of corporate services. She was not part of the company's executive committee, though sometimes she would be asked to attend those meetings if there was a specific topic where her input might be required. After she gave a report, she'd promptly be excused.

All of that began to change in February 2005. The company had announced plans to acquire Advanced Fiber Communications in Petaluma, Calif., and Tellabs CEO Krish Prabhu decided to re-evaluate the senior management structure. Since Tellabs' IT organization was driving the integration of the two organizations, Holley began reporting to him and joined the company's executive committee.

But just getting a seat at the table wasn't enough, Holley says. Membership on the executive committee gave her an opportunity to strengthen her relationships with other business leaders.

Business leaders "won't work those relationships with IT," she explains. "You've got to work those relationships."

For instance, when Holley was making plans to visit one of Tellabs' design centers in Dallas in December, she discovered that the company's sales chief was also Dallas-bound. She made sure that she was on the same flight so that she could talk to him en route about a variety of business issues. "The CEO-CIO relationship is only one alignment point," says Holley. "You have to do this with each and every executive."

Business View

Because many CEOs have finally recognized the value of aligning IT with the business, they are increasingly recruiting CIOs from areas other than IT in order to find candidates with strong business acumen.

Accenture Ltd.'s Frank Modruson is one of them. Five years ago, he was working in Accenture's go-to-market business when the company's chief administrative officer asked him if he'd like to replace the retiring CIO. He jumped at the chance.

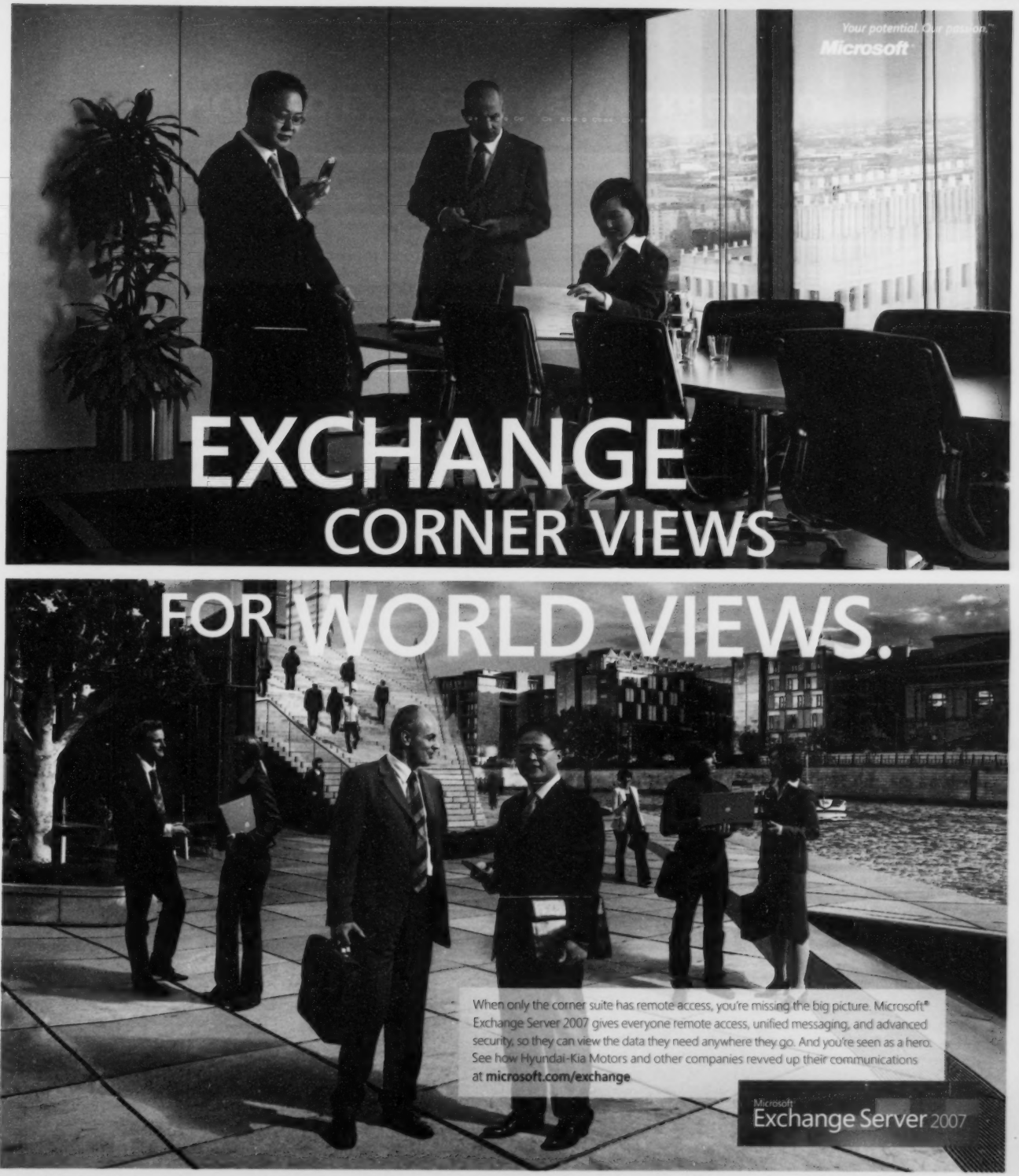
Having spent 14 years with the company, Modruson already knew 70% of its senior managers when he stepped into the role. "By already knowing them and having walked in their shoes, you're in a very good position to listen to them and understand their needs," he says.

Because CIOs have a unique horizontal view of an organization's businesses and departments, even IT leaders who have more of a traditional technology background have been able to lead major business process improvement efforts.

For instance, in late 2003, Bryan Sastokas, director of information services, strategy and architecture at Universal Services Administrative Co., spearheaded a corporate initiative aimed at controlling the rampant growth in data storage at the Washington-based nonprofit, which administers a fund providing affordable telecommunications services to communities across the U.S.

Although it sounds like an IT project on the surface, the effort, which includ-

Continued on page 18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Continued from page 16

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Despite the CIO's rise to strategic heights, two things haven't changed: IT spending is still typically the largest portion of a company's capital expenditures, and the CIO remains focused on cost control.

"Cost management will never, ever go away," says Karl Wachs, CIO at Celanese Corp. in Dallas. "If you can't manage your costs, you can't qualify for the other stuff. Just being strategic isn't sufficient."

New Challenges

If the evolution — and elevation — of the CIO role has brought IT executives opportunities for increased clout, it has also brought bigger challenges. After years of cost cutting, many CIOs are now facing a bottleneck of projects to prioritize and orchestrate. "There are so many projects out there that CIOs are only limited by the number of people available to [implement] them," says Hotka, who is the principal at Retail Insiders, a consulting firm in Washington.

This is particularly true for CIOs who have been successful with the strategic use of technology. For example, Dennis L'Heureux, CIO and senior vice president for planning at Rockford Health System in Rockford, Ill., recalls a lively board of directors meeting he recently attended. "In just about every workgroup we had, everyone who gave a report talked about the need for IT at some capacity," says L'Heureux. "I laid my head down on the table and [jokingly] asked, 'How are we gonna do this?' "

Meeting customer demands often requires a balancing act. For example, Merv Tarde, CIO at Dallas-based Interstate Batteries, does a lot of custom development for business customers who like doing things their own way. But he has to be mindful of architecture and integration requirements "so you don't have all of these islands out there" that can impede business and drive up infrastructure costs, he says.

As change agents, CIOs are also under pressure to ensure that business units can handle the changes associated with new systems. "The ability to deliver technology sometimes precedes the readiness for it," says Carl Wilson, executive vice president and CIO at Marriott Corp. in Bethesda, Md.

He recalls difficulties with a sales system installed a few years ago that introduced a process much different than what the sales force had been using. "We threw too much at them at once," Wilson says. Now, Marriott's IT group pays more attention to phasing in new technology in stages and providing adequate training, he says.

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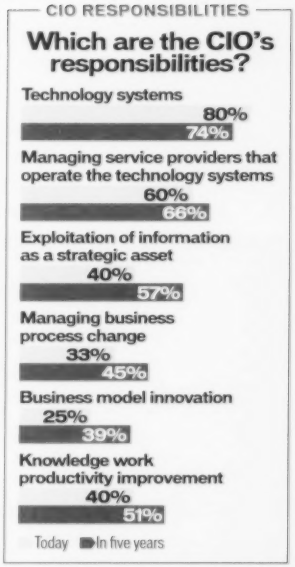

The business savvy that IT leaders have developed and the trust they've built through execution is even leading some companies to tap their CIOs to take on additional responsibilities outside their normal roles (see story below). But even for the more typical CIO, the pocket protector is no longer the accessory of choice. The CIO, says Tarde, "is definitely going to be focused around the business end of things." ▸

Double-Duty CIOs

Al-Noor Ramji is a triple threat. When Ramji was hired as CIO at BT Group in August 2004, he was simultaneously named CEO of BT Exact, the London-based telecommunications giant's IT and operations business, which serves both internal and external customers.

Last October, Ramji was also made responsible for overseeing BT's end-to-end customer experience.

Unusual? Not given Ramji's track record. As part of a companywide IT-business alignment effort that he launched in January 2005, Ramji and his IT team have been tracking measurements such as how quickly internal and external customers receive technology and how satisfied they are with it.

When CEO Ben Verwaayen saw how customer-centric Ramji's areas had become, he tapped Ramji to oversee BT's customer-facing activities as well.

The number of IT chiefs who wear two or more hats seems to be on the rise. "It's being driven by a perception that they're doing a good job and they're trusted," says Cathy Hotka, a former CIO who is now the principal at consultancy Retail Insiders.

"If the CIO is viewed as the go-to guy because of his broad background, the CIO is often asked to do a job until they can fill it with [another] executive," says Stephen Pickett, CIO at Penske Corp. in Bloomfield Hills, Mich.

Those temporary fill-in jobs have a tendency to become permanent. Lew Temares, vice president of IT at the University of Miami, was chosen for a two-year engagement as the dean of the university's College of Engineering. That was back in 1994.

No matter. Double-duty CIOs are extremely adept at time management. "I set up my time in the office in such a way that I am located in the engineering office half the time and in the IT office the other half the time," says Temares.

Still, it can be a stiff challenge for CIOs to oversee different functional areas, particularly when those activities don't dovetail with one another. At Interstate Batteries, CIO Merv Tarde picked up oversight of both facilities and real estate about three years ago.

"Property management doesn't really integrate with IT, but facilities do," says Tarde, noting that IT recently led a rearrangement of corporate space, partly because computer cables and telecommunications lines had to be rerouted. "I find these two [functional areas] work very well together," he says.

Double-duty CIOs often rely on key staffers to help them juggle two or more jobs. "I don't find [the workload] horrendous because of the way I've organized my direct reports," says Dennis L'Heureux, CIO at Rockford Health System.

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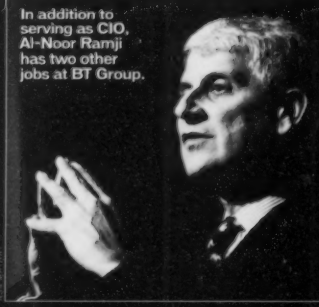

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To help him do his many jobs, L'Heureux has assigned vice presidents who report to him to manage planning, architectural services and strategic information. That enables him to stay on top of everything. Well, almost everything.

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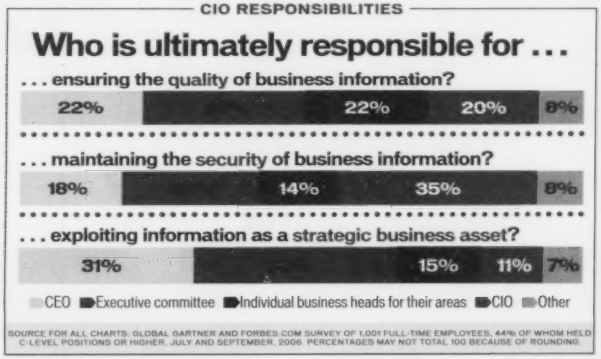

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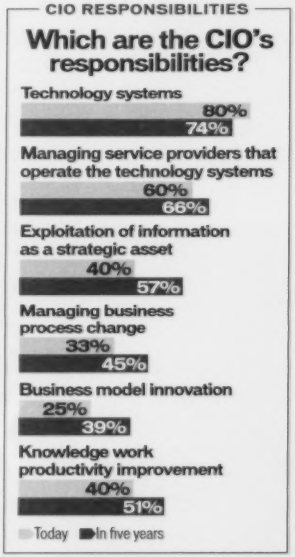

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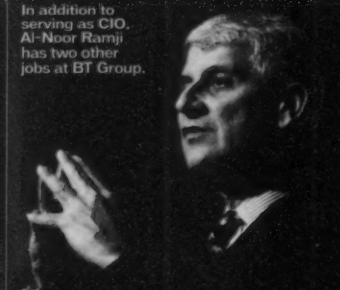

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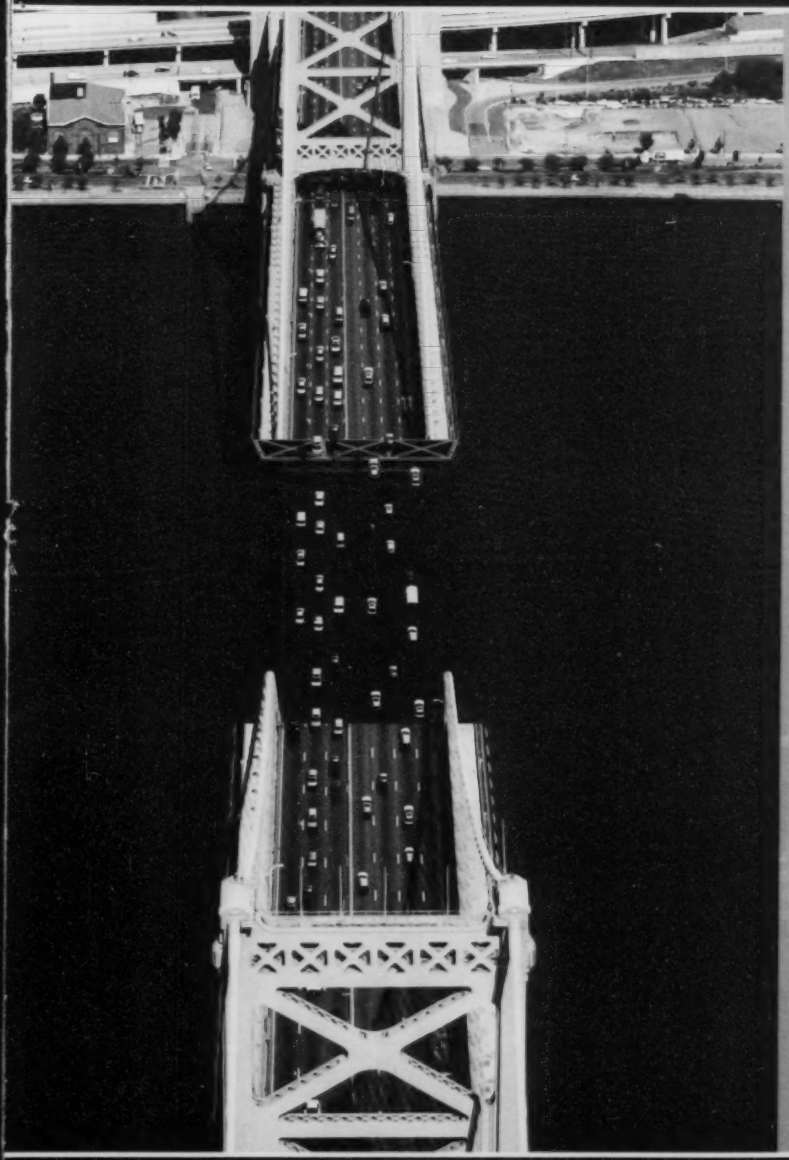
HOW TO EXPECT THE UNEXPECTED



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Where Does the Time Go?

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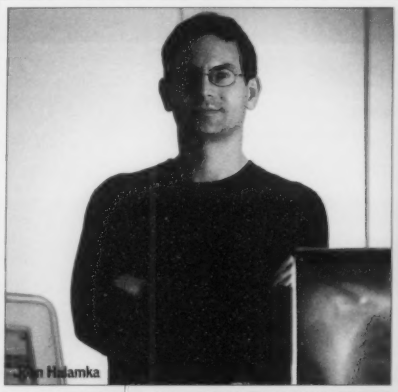

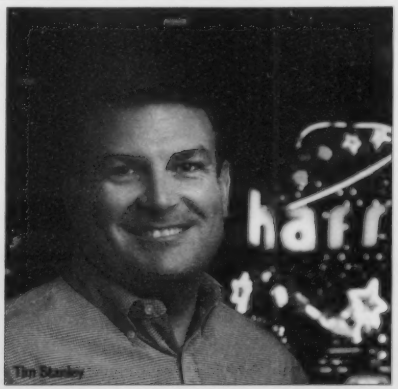

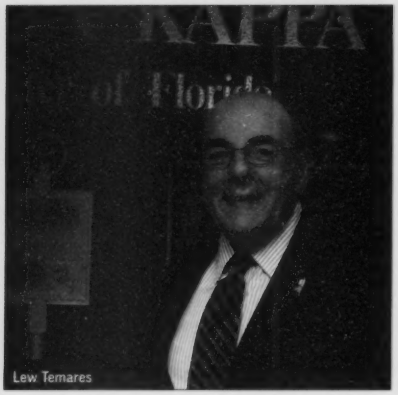

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When John Halamka first became the CIO at Beth Israel Deaconess Medical Center in Boston in 1998, he was told that being an IT chief was a 9-to-5 job. He quickly discovered that they had it backward. "It turned into a 5-to-9 job," says Halamka, meaning 5 a.m. to 9 p.m.

Today's CIOs cope with a seemingly endless barrage of meetings with senior executives, IT staffers, [redacted] users, vendors, external customers, Wall Street analysts and others. Those meetings, combined with a crush of e-mail and daily fires that must be extinguished, conspire to make an IT leader's time more precious than ever.

Computerworld spoke with four CIOs from different industries — Allstate Insurance Co.'s Cathy Brune, Harrah's Entertainment Inc.'s Tim Stanley, Lew Temares at Florida's University of Miami and Halamka — to explore how they spend a typical day (if there is such a thing) and how well that maps with their respective time management preferences.

In the Wee Hours

Like other CIOs, Halamka, who is also the CIO at Harvard Medical School, has made the extended workday work to his advantage. Having become accustomed to sneaking by with four to five hours of sleep each night, he typically starts each day at 5 a.m., "when the world is quiet," by writing presentations or preparing reports.

"Try writing something at noon on a Tuesday when there's an e-mail [interruption] every 30 seconds," says Halamka, who is also a *Computerworld* columnist.

After a full day of meetings and a break for dinner with his family, Halamka usually sets aside time at night, when he's separated from the distractions of the office, to do more "thoughtful" work, such as strategic planning.

Halamka's schedule has the precision of a surgeon's scalpel (see "A Day in the Life"), except for his nemesis: e-mail. He typically plows through 500 messages per day using his BlackBerry, but if Halamka had his way, he'd devote less time to it. "How many e-mails do you receive each day that aren't actionable?" he muses. "There should be postage attached to e-mail before people press the Send button."

Open Door, Open Mind

Brune's workday usually begins at 5:30 a.m. She starts off by checking e-mail and eating breakfast with her two children. After that, she says, there's no such thing as a typical day. But Brune, a 30-year Allstate veteran who held various sales and operational roles in her first 19 years there, leaves time each day between management meetings for impromptu gatherings requested by IT or employee groups to discuss strategy or problems.

Recently, for example, her IT finance team requested a meeting to go over their goals for the year. She used the get-together to also acknowledge the great work the group had been doing.

Unlike other CIOs, who frequently see lunch as an opportunity to squeeze in another meeting or to catch up on e-mail or paperwork, Brune often heads

A Day in The Life

Here's how a recent Tuesday unfolded for John Halamka, CIO at Beth Israel Deaconess Medical Center and Harvard Medical School:

5 a.m.	Write annual IT report for Harvard Medical School
6 a.m.	Work on several Beth Israel Deaconess Medical Center strategic plans: ■ E-prescribing rollout ■ Radiology provisional/wet reads workflow ■ Ambulatory medical record support for travel clinic immunizations
8 a.m.	Visit Occupational Health Office for mandated yearly TB test
8:30 a.m.	Meet with senior vice president of quality to discuss plans for: ■ Infectious disease surveillance ■ Medication reconciliation in outpatient procedural areas
9 a.m.	Complete human subjects/Institutional Review Board submissions for two upcoming grants
10 a.m.	Interview with *Computerworld*
11 a.m.	Tape an e-prescribing video for the Healthcare Information and Management Systems Society
Noon	Write and send enterprise e-mail about daylight-saving time IT issues
1 p.m.	Attend Revenue Cycle Project steering committee meeting
3 p.m.	Review 2007 disaster recovery plans
5 p.m.	Dentist appointment
6 p.m.	Dinner with family
8 p.m.	E-mail
10 p.m.	Practice Japanese flute

to Allstate's cafeteria, where she likes to introduce herself to groups of employees and gather their impressions of the company's IT organization.

"Sometimes I'll sit down with people for 30 minutes and come back with 30 ideas," says Brune. "I make an effort to listen and discover ways we can do things better. I don't take offense if you're telling me from the heart something you don't feel we're doing well."

Brune devotes a lot of her spare time to volunteering. She serves on the worldwide and Chicago Junior Achievement boards and is a member of the Lake Forest (Ill.) Hospital Foundation's board.

Brune says that she finds the volunteer work rewarding and enjoys meeting other area executives.

She feels that she apportions her time pretty effectively among various stakeholder groups, including the IT staff, corporate employees and Allstate's external customers. But if she had her druthers, she'd spend more time with smaller technology firms to discuss the ideas they're exploring. "I love listening to the way they think," she says.

Time Slots

Time management is particularly critical for IT leaders like Harrah's Stanley who shoulder responsibilities that extend beyond the traditional CIO role. Like Halamka, Stanley typically catches four or five hours of sleep before starting his day with a workout, a shower and some time with his 3-year-old daughter before she leaves for preschool by 8 a.m. Then he's off to one of his two offices on the Las Vegas strip.

Following a 12-hour day packed with meetings "out the ying yang" with business peers, employees and vendors, Stanley tries to leave the office by 8 p.m. so he can spend time at home with his wife and his daughter before the youngest Stanley goes to sleep. But Dad won't hit the sack for several more hours. A self-confessed night owl, Stanley says he often doesn't get to catch up on e-mails, reports and strategic planning until well after sundown. Perhaps that's apt, since he works for a gaming and hospitality company that's busiest at night and on weekends.

"I'm jokingly referred to as 'Always On,' " says Stanley, who, after six years as CIO, was recently tapped to also oversee the company's gaming operations and serve as its chief innovation officer. "During the week, my wife will ask me to 'turn it off for a minute' when she can see me parallel processing," he says.

Those new responsibilities are spreading Stanley even thinner. "With the other two jobs, it's even more challenging," he says. "I know for a fact that I want and need to spend more time on the gaming, non-gaming and innovation roles."

So until he's able to hand off more of his day-to-day CIO duties to some of his top lieutenants, Stanley is doing his best to juggle the three jobs. "I can process it all, but it's very time-sliced," he says.

"It's stressful at times," admits Stanley who, as a result of his increased workload, has even less time to devote to his passion for downhill skiing. And even though he commits a considerable amount of time to his staff's career development, Stanley wishes he could do more. "You can never invest too much time on that, and I never feel like I'm doing enough," he says.

Course Load

Multitaskers could pick up some tips from Temares. He has run the IT organization at the University of Miami for 27 years and was named dean of the College of Engineering in 1994 for what was then expected to be a two-year gig. He's been juggling both roles ever since and splits his time between two campus offices.

Fortunately for Temares, there's occasional overlap between the two jobs. For instance, he recently had lunch with an IBM executive who is involved in both product development and hiring engineering students from the university.

"I never have lunch by myself," says Temares, who tends to dine either with university officials to market the IT organization's value or with vendors or business colleagues.

Between budget, strategy and other types of meetings, Temares manages to set aside time to meet with his eight direct reports and other staffers.

"My direct reports like to know that I'm paying attention and spending time with them," says Temares. "I spend a fair amount of time on staff issues, because if I hire the right people, I can spend more of my time doing my job."

Although Temares believes that his schedule maps fairly closely with an ideal workday, he does crave more time for strategic thinking. "Most of my planning comes on weekends," he says.

&

When CIO **Lew Temares** breaks away from his South Florida office, he plays tennis each weekend morning and usually squeezes in a round of golf one of the afternoons.

While the exercise offers Temares some much-needed distance from day-to-day IT operations at the University of Miami, it's not a complete break from work. Temares alternates playing tennis with his son, who is a computer industry professional, and other deans from the university.

"We talk about work during the breaks," he says. "Sometimes I come away with some great ideas."

Allstate's **Cathy Brune** admits that she's never been much of a fitness buff. But after her company recently retained a consultant who offered senior executives advice on healthful foods and exercise aimed at providing extra stamina during the day, Brune modified her diet and began walking on a treadmill at home after work.

"My husband told me that if I had any more energy he'd knock me in the head, since [that would mean] I have more to-do's for him," says Brune, who listens to mystery books on tape while she walks. And although she's leaning toward eating more healthful snacks, such as almonds, she admits to sneaking an occasional brownie.

John Halamka gets a break by hoofing several miles a day through the streets of Boston between his two offices and other meeting places. That helps keep the CIO of both Beth Israel Deaconess Medical Center and Harvard Medical School in shape for the more rigorous mountaineering he does on weekends.

During the weekend treks, Halamka uses rope and other mountain-climbing gear to scale 15 to 23 miles of ice and rock over a six-to-nine-hour period – the equivalent of a double marathon, he says.

Halamka finds the climbs rejuvenating – and refreshing in other ways as well. "It's one of the few places where I don't bring a BlackBerry," he says. "A way for me to separate from the rest of my lifestyle."

Halamka finds serenity each night through playing the Shakuhachi, a Japanese flute that caught his interest during a visit to Japan three years ago. "It's devilishly hard to play," he says, but it provides a sort of spiritual tranquility.

Tim Stanley has a "fully connected" weekend house a few hours from Las Vegas that enables him to pursue his passions for downhill skiing and boating. The setup allows him to combine "family time and strategic thinking time" while remaining in touch with Harrah's nonstop operations, he says.

One recent weekend, it also permitted him to spend a few hours teaching his 3-year-old daughter to ski. "That was worth it," he says, "and then some."

– THOMAS HOFFMAN

Suck-ups: Why CIOs Love Them

In an IT and business environment that ostensibly values employees who question authority, express their opinions and challenge the system, why is it that the fawning bootlickers and yes men often seem to get recognized and rewarded? **Marshall Goldsmith**, *a leadership development trainer (www.marshallgoldsmithlibrary.com), raises the question in his new book,* What Got You Here Won't Get You There *(Hyperion, 2007). He told Kathleen Melymuka that your dog could have something to do with it.*

You say leaders typically ask for one type of behavior from their staffers but reward another. What do they ask for, and what do they reward? Managers say they want people who challenge the system, tell them what they think, give candid, honest feedback. But what actually happens is that we frequently reward suck-ups without meaning to. Every leader says, "I hate suck-ups." If that's true, how come so much sucking up is going on?

What's the difference between a collaborative team player and a bootlicking toady? The difference is that the collaborative team player is trying to actually do what is good for the corporation and takes the high road. The bootlicking toady is trying to do whatever it takes to ingratiate himself with upper management for personal gain, and perhaps at the expense of the corporation.

If leaders say they discourage derrière-kissing behavior, why does it dominate the workplace? Because without meaning to, we all tend to create an environment where people learn to suck up to us.

How? In my classes, I always ask, "How many of you own a dog that you love?" They all raise their hands. Then I ask, "What family member gets most unqualified praise and positive recognition from you?" Eighty percent of the time, the answer is the dog. I ask if they love the dog more than the other members of their families. They all say no. Then why does it get more unqualified praise and recognition? They say, "It's because the dog doesn't talk back, it's always happy to see me, it wags its tail and slobbers all over me." The dog is a suck-up. And it works. And that behavior gets reinforced.

So, many of us unconsciously encourage and reward this same kind of behavior at work? Of course we do. And we see it in everyone else. We just don't see it in ourselves.

What's the effect of all this in the workplace? The unconscious effect is that people become preoccupied with the wrong thing. Rather than do my job, I try to make my manager happy. I focus on my manager's happiness as opposed to my own productivity or serving my customers.

I imagine the nontoadies aren't too happy with this. The nontoadies become alienated. They think, "This is a stupid company, because the only ones who get ahead are the suck-ups."

Is there anything about the IT environment that makes these issues more difficult to deal with? Yes. Many IT people are lost in their own heads. They're even less conscious than the average executive about the interpersonal side of work. They're even less likely to see this stuff and more likely to deny it because they have the illusion of objectivity. Hence the popularity of "Dilbert" among IT people. Managers think, "Let's all laugh about 'them,' " because they suffer under the illusion that they are different from the idiots who create those environments.

If rewarding brown-nosers is an unconscious behavior, how can I, as an IT leader, stop myself? What you need to do is rank your direct reports in four ways:

1. How much do they like me? You don't really know how much, but what's important is how much you think they like you.
2. How much are they like me? How much do they remind me of the ever-so-lovely and wonderful me?
3. What is their contribution to the company and to our customers?
4. How much positive personal recognition do I give them?

If No. 4 is more highly correlated with 1 and 2 than with 3, that means you're teaching other people to suck up to you.

If I find that I'm guilty, what do I do? Do rigorous testing. Anytime you start giving recognition, focus on why. Is it because this person is doing a great job or because this person makes me happy, smiles when I show up and acts like my dog?

But I have to say, I also fall into this trap. I love my dog, Beau. When I come home from my travels, he hops up and down and is always happy to see me, and I immediately go to him.

One day this happened when my daughter, Kelly, had come home from college. She gave me this disgusted look, put her hands in the air like paws and said, "Woof, woof!" ▸

Wrong

I find that the 20 flaws that hold most people back are rarely flaws of skill, intelligence or personality. They are challenges in interpersonal behavior, often leadership behavior:

1. Winning too much. The need to win at all costs and in all situations – when it matters, when it doesn't, and when it's totally beside the point.

2. Adding too much value. The desire to add our two cents to every discussion.

3. Passing judgment. The need to rate others and impose our standards on them.

4. Making destructive comments. The needless sarcasm and cutting remarks that we think make us sound witty.

5. Starting with "No," "But" or "However." The overuse of these negative qualifiers, which secretly say to everyone, "I'm right. You're wrong."

6. Telling the world how smart we are. The need to show people we're smarter than they think we are.

7. Speaking when angry. Using emotional volatility as a management tool.

8. Negativity, or "Let me explain why that won't work." The need to share our negative thoughts, even when we aren't asked.

9. Withholding information. The refusal to share information to gain or maintain an advantage over others.

10. Failing to give proper recognition. The inability to praise and reward.

11. Claiming credit that we don't deserve. The most annoying way to overestimate our contribution to any success.

12. Making excuses. The need to reposition our annoying behavior as a permanent fixture so people excuse us for it.

13. Clinging to the past. The need to deflect blame away from ourselves and onto events and people from our past; a subset of blaming everyone else.

14. Playing favorites. Failing to see that we are treating someone unfairly.

15. Refusing to express regret. The inability to take responsibility for our actions, admit we're wrong or recognize how our actions affect others.

16. Not listening. The most passive-aggressive form of disrespect.

17. Failing to express gratitude. The most basic form of bad manners.

18. Punishing the messenger. The misguided need to attack the innocents who are only trying to help us.

19. Passing the buck. The need to blame everyone but ourselves.

20. An excessive need to be "me." Exalting our faults as virtues simply because they're who we are.

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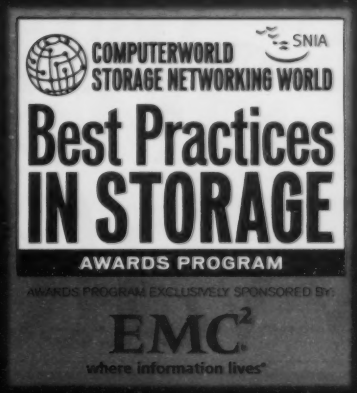

Storage Networking World proudly announced the results of the "Best Practices in Storage" Awards Program. This program honors IT users "Best Practice" case studies selected from a field of qualified finalists.

Honoree Award Recipients in each of the following categories were recognized during the Gala Awards ceremony at Storage Networking World in San Diego, CA, April 18th:

Innovation and Promise

Northeast Delta Dental, Concord, New Hampshire

Finalists: Colonial Williamsburg Foundation, Williamsburg, Virginia
Health Alliance, Leominster, Massachusetts
University of Florida, Gainesville, Florida
Walt Disney Feature Animation, Burbank, California

Maximizing ROI

Cingular Wireless, Alpharetta, Georgia

Finalists: Central Bank, Jefferson City, Missouri
Chicago Mercantile Exchange, Chicago, Illinois
Children's Hospital of Los Angeles, Los Angeles, California
Six Flags, New York, New York

Planning Designing and Building Strategic Storage Infrastructure

Shinhan Bank, Seoul, Korea

Finalists: Cambridge University High Performance Computing Services, Cambridge, United Kingdom
Silverpop, Atlanta, Georgia
Telstra, Melbourne, Australia
Woodbridge Township, Woodbridge, New Jersey

Storage Reliability and Data Recovery

New York-Presbyterian Hospital, New York, New York

Finalists: Edward Hospital & Health Services, Naperville, Illinois
Fulton County, Atlanta, Georgia
GFS Data Protection Services/Windows Live, Redmond, Washington
LifeGift Organ Donation Center, Houston, Texas

Systems Implementation

The European Organization for Nuclear Research (CERN), Geneva, Switzerland
Stanford University, Stanford, California

Finalists: Brookhaven National Laboratory, Upton, New York
ICICI Bank, Mumbai, Maharashtra
NBC Olympics, New York, New York

Mark your calendar to submit nominations for the Fall 2007 Awards Program to be announced May 2007

Career Watch

Tom Casey

TITLE: Vice president and practice leader, workforce transformation practice

COMPANY: The Concours Group, Kingwood, Texas

Q&A

As a growing number of baby boomer IT workers near retirement age, enrollments in university computer science programs have dropped precipitously. No matter how you slice it, the numbers don't add up favorably for the IT and human resources leaders who will be involved in succession planning in the coming years. *Computerworld*'s Thomas Hoffman spoke with Tom Casey about the types of staffing strategies that CIOs should be following but often aren't.

What are the most common labor recruitment and retention mistakes CIOs make? There are four red flags we look for. One is that they haven't done any planning – they're relying on HR. Second is the presumption that when people reach a certain age, like their early 50s, they're on the back nine of their careers, and they're looked at a certain way. Third is that they aren't engaging their IT employees. Fourth is that they haven't educated themselves to the supply and demand elements which will disenfranchise their IT organizations.

What are some steps IT leaders should be taking to prepare their staffs for the future? Much more comprehensive workforce planning is needed. This includes digging deeper, by classifying the people who are leaving [by the reasons] they are leaving, by the roles that will be left vacant and by the external market conditions [the employer] will have to cope with to fill the vacant positions. We are seeing companies "retire" retirement, looking at ways of keeping people longer and/or securing the services of retirees through contracts.

CIOs should also be looking at employee engagement factors. Just 20% of the people in IT feel a strong commitment to the organization. So some IT leaders are trying to increase employee engagement through variable compensation packages, much better learning opportunities and much better retention packages, and looking at how the incumbents are being managed.

Any other suggestions? If you feel your IT function is in good shape, I would actively encourage you not to take a lot of reassurance from this. This [IT labor shortage] problem is going to be with us on a global basis for quite some time. There's no silver bullet. If you're in good shape now, terrific, but I wouldn't get lazy. People with IT backgrounds have an awful lot of opportunity for mobility.

PAGE COMPILED BY JAMIE ECKLE.

THE CIO Agenda 2010

WHAT ARE THE AREAS of expertise that are essential for the CIO of the next decade? Boston-based executive search firm Christian & Timbers has come up with six, based on years of interviews with "industry's top business, technology and innovation leaders":

- **Business acumen.** The CIO of 2010 not only understands business, but also has empathy for business people and acts as a true leader and business partner.
- **Technical competence.** This becomes less important than other criteria as the size of a company increases, but the CIO still needs to have well-rounded experience in all traditional technical areas.
- **Non-CIO functional experience.** The ideal candidate has served in a financial, marketing or other non-IT functional area and has experience running a line of business for profit.
- **Vendor and sourcing management.** The CIO must be able to evaluate and lead initiatives in the areas of outsourcing and other staffing alternatives.
- **Career future.** The best CIO isn't content to have grabbed the top IT position. He has ambitions beyond IT.
- **Global.** The CIO must bring experience in managing resources around the world, and he must understand how to manage a team from diverse cultures. Ideally, he has lived abroad or at least worked internationally.

THE SOCIETY for Information Management also had the CIO of the near future in mind when it commissioned Ritu Agarwal of the University of Maryland and Cynthia Beath of the University of Texas to prepare a report called "Grooming the 2010 CIO." The professors warned in the report that, among other things, there will be a shortage of talented, well-groomed CIOs. They also offered companies advice on how to groom CIOs from inside the ranks. Agarwal and Beath listed these seven roles that the CIO of 2010 will have to fill:

- **Strategist.** Innovation catalyst, effective business partner and shaper of mission.
- **Relationship architect.** Relationship builder across and beyond the enterprise, and relationship manager.
- **Leader.** Designer, leader, inspirer and developer of people.
- **Information steward.** Guardian of high-quality data and operationally reliable systems, as well as security and privacy.
- **Integrator.** Leader in enterprisewide integration of processes, information and decision support.
- **Educator.** Missionary who provides insights about key information technologies.
- **Utility provider.** Supplier of solid, dependable and responsive IT infrastructure services.

ALSO WEIGHING IN on what CIOs should be doing is Lewis Cardin, a Forrester Research Inc. analyst who said in a recent advisory that CIOs should focus their time in four directions:

- **Above (30%):** Interacting with the CEO, the board of directors, the audit committee and other big cheeses builds credibility for IT and cements the CIO's role as a strategic player.
- **Across (30%):** Spending time with other executives and key vendors keeps the CIO clued in to key business issues.
- **Below (30%):** Checking in with the home team in IT provides leadership and direction and keeps the IT machine well oiled.
- **In the mirror (10%):** Candid discussions with mentors, coaches and trusted colleagues, as well as time spent alone, helps the CIO gain perspective, think strategically and reflect on what's working and what isn't.

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SOURCE: HARVEY NASH GROUP PLC SURVEY FOR KPMG LLP OF 172 CIOs, MARCH 2007

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9:00am to 9:40am	**Market Overview of Grid, SOA and Virtualization** Michael Hugos, Computerworld Columnist, CIO at Large and Author of *CIO Best Practices: Enabling Strategic Value with Information Technology* and *The Greatest Innovation Since the Assembly Line*
9:40am to 10:20am	**Case Study: The Chicago Stock Exchange** David Milne, Director, Database Technologies, Chicago Stock Exchange
10:20am to 10:35am	**Refreshment and Networking Break**
10:35am to 11:15am	**Industry Expert Presentation** Richard McCormack, Senior Vice President, Fujitsu Computer Systems
11:15am to Noon	**Moderated Panel Discussion** Moderator: Ron Milton, Executive Vice President, Computerworld

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Management by Procrastination

There's a time for every out-of-scope project task, and the time is later. By Thomas Cutting

IT MENTOR You have been taught since childhood not to put off until tomorrow what can be done today. Conventional wisdom says to do it, and do it now! My experience as a project manager, however, indicates that procrastination works.

If you're like me, you've found that roughly 90% of the outside-of-scope actions that people ask to have added to a project will be changed, dropped or completed by someone else before you can get to them. All you need to do is determine which items make up the 10% that can't be avoided. That's where management by procrastination can change your life.

To get in the right frame of mind and drive the theory home, quietly chant the following the next time you're sitting through a boring meeting:

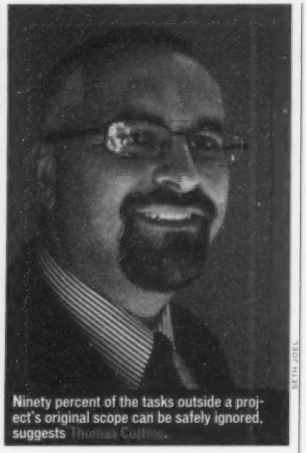
Procrastinate, procrastinate.
Put it off till it's too late.
S-T-A-L-L.
Stutter, stop . . . wait.

There isn't much science behind my theory, but I've found that procrastination can be effective when others attempt to tack tasks onto your project. To make it work, you need to learn to identify tasks, prioritize them and deliver.

■ **IDENTIFY.** Many transient tasks are assigned during meetings. Someone will ask a question that results in the need for additional research, or the boss will want someone to follow up on an idea. Taking the time to really identify each task is the first step in weeding out the 90% that will magically disappear. It involves more than just writing down whatever is asked.

First, you must confirm that what you heard was a request for action. The boss may have just been thinking out loud.

Second, make sure you're the one he's expecting to do it. Just because no one else is volunteering doesn't mean you have to. If it isn't obvious who would be the right person to do the task, ask.



Ninety percent of the tasks outside a project's original scope can be safely ignored, suggests Thomas Cutting.

Finally, put it in writing for review and approval. "Approval" in different settings can be anything from a verbal agreement to an e-mail confirmation, all the way to actual wet signatures. Choose appropriately.

So, to put this in the simplest terms, separate the real tasks from the fleeting ones by asking the following questions:

1. Did you just say what I think you said?

2. Are you talkin' to me?

3. Could you sign here . . . and here . . . initial this . . . and thumbprint there?

At this stage, it may look like procrastination has only brought us more work. We've taken time away from other things to create a list. How has this done us any good? you may ask.

Here's how: By acknowledging the list, everyone has admitted that all the items on it are new and not part of the original scope. As a result, some items will be dropped as unimportant. Meanwhile, as project manager, you have allowed your team members to continue their work uninterrupted as you move to the second step.

■ **PRIORITIZE.** Determine which requests on the list are the most important. There are several ways to assign priority. The simplest and most practical method is to ask key stakeholders to rank their top three tasks and then work them into the schedule. On the other end of the spectrum, the team can rank each request based on a predetermined set of criteria. Here are some criteria that may be helpful:

Return on investment. Calculate the cost of the request and compare that with the benefit. This will allow you to determine which items will give you the biggest bang for the buck so you can focus on those. Additional work is required to define the cost, savings, profit and effect on the schedule for each request.

Functionality vs. froufrou. Items that make the system function properly are more important than bells and whistles. Use the project charter and other defining documents to compare requests against the project's purpose and requirements. Features that fail the functionality test can be implemented in future phases.

Ease of implementation. More-complex tasks are going to consume more of the time your team has to complete the project. Move these tasks to the bottom of the list in favor of quick-hit items, effectively procrastinating them into the next phase of the project.

However the decision on adding tasks is made, follow defined change management processes. This will ensure that everyone agrees to each change and how it will be funded. If more money or time is required, get commitment from the sponsor before moving forward.

Has procrastination paid off yet? By taking the time to prioritize the list, you have announced to the stakeholders that their wish lists cannot be completed in their entirety. More of the requests have now moved to the 90% category — those you can ignore.

■ **DELIVER.** Now you've narrowed the to-do list down to the hypothetical 10% that can't be ignored. Because these tasks will reduce your team's productivity and affect the project delivery dates, they need to be placed in the schedule with resources assigned to them. You can now see and report on the effect this will have on the project schedule.

Then do the work. It sounds simple, but if you have committed to it and your stakeholders are expecting it, you had better get it done. Treat the tasks like the others in your plan, and track each to completion. Report the continued effect on the schedule.

Finally, announce the completion of significant items. This feedback builds stakeholders' confidence in both the process and the team.

So don't put it off any longer. Start procrastinating today.

I can already hear the objections to my laid-back approach. But laziness is not the cause of failure for most projects. Overcommitment and excessive optimism kill far more deadlines than slacking does.

If I haven't persuaded you to add procrastination to your toolbox of project management techniques, go ahead and keep doing what you've been doing, but don't say I didn't warn you. Here are some suggestions for those who decide against management by procrastination:

Volunteer more. If the boss is asking, raise your hand first. Just being willing looks good. Who cares if you are ultimately successful?

Never freeze requirements. After all, what effect could one more have?

Avoid formal changes. It takes too much time away from real work to document and gain approvals.

Shift resources to attack the latest request. If it's new, it should be done first.

Don't bother prioritizing. All requirements were created equal. Just get busy.

– THOMAS CUTTING

Cutting is a project management professional and senior principal consultant at Keane Inc. in California. Contact him at Thomas.Cutting@keane.com.

Be Careful What You Ask For . . .

Our manager asks to be hacked, and that's exactly what he gets – with a bit of embarrassment thrown in. By Mathias Thurman

AS I HINTED in my previous column, we weren't too pleased with the results of our recent risk assessment. We spent close to $100,000 so that a team of outside consultants could conduct a variety of penetration tests and vulnerability assessments against portions of our infrastructure. The good news is that our externally facing resources were fairly resilient and the contractors were unable to effectively hack into our internal network from the Internet. The bad news is that we're soft on the inside.

SECURITY MANAGER'S JOURNAL

Although the assessment's scope was limited, these hackers for hire basically broke open 95% of the company.

Our budget couldn't accommodate a complete assessment. My company has over 10,000 network nodes, dozens of applications and more than a score of remote offices worldwide. Instead, we used our $100,000 to focus on some core applications and a select number of desktops and servers. In addition, we did a review of our current policies, procedures and guidelines.

The heart of the assessment was a penetration exercise in which the consultants hacked into our infrastructure. They started by scanning 100 of our computers, located all around the world and ranging from desktop PCs to Unix and NT servers. They found many servers that were vulnerable, but they focused on a single one in our Taiwan office, a Windows 2000 server running Microsoft's Systems Management Server. We use SMS for change and configuration management of our Windows servers and desktops. This particular server is used for patch management. So imagine the embarrassment we felt when the consultants' successful probing of this server made us realize that it hadn't been patched in two years! It was a bitter irony, because the lack of patches meant that a server used on the front lines in our fight against vulnerabilities was itself susceptible to a number of them.

The consultants zeroed in on one, a vulnerability associated with Microsoft Plug and Play, which should have been patched with MS05-039. They ran an exploit that capitalized on that vulnerability and successfully executed programs remotely on the vulnerable server. The remote code that they chose, a program called Pwdump, dumps the password hashes from a server.

The server in Taiwan had about 25 accounts associated with it. Like any hackers worth their salt, the consultants moved the hash file to a separate computer and then used a freely available program called John the Ripper to crack the hashes and obtain the clear-text passwords for each user account.

> In 48 hours, our hackers for hire had been able to crack 35,000 accounts.

Hold on, because things only get worse from there. One of the accounts that the consultant/hackers now had the password for happened to be the SMS service account. That wouldn't have been a big deal, but the service account wasn't configured properly.

Escalated Privileges

Service accounts, which allow the server to run services and applications with escalated privileges, normally aren't allowed to interactively log onto a Windows server in the same way that an administrator can. It's easy enough to prevent such interactive log-ons; there's a simple configuration option available when you set up service accounts, so it's just a matter of checking off a box. Unfortunately, that box wasn't checked off for this server.

That meant that our hired hackers now had the password to an account with escalated privileges, and so they were able to log onto our primary corporate domain controllers. Once logged in with administrator's privileges, they simply repeated the steps that had gotten them this far: They ran Pwdump and then used John the Ripper to crack the passwords. This time, however, they got a lot more than the passwords to two dozen accounts. In fact, they dumped 36,000 accounts and soon had possession of the passwords of employees, service accounts and application accounts. In 48 hours, they had been able to crack 35,000 accounts.

Our CIO freaked out when he heard this news. You can't blame him — not only had our passwords been cracked, but those clear-text passwords were now in the possession of outsiders. He demanded that all passwords be changed immediately. Again, an understandable reaction, but not necessarily the wisest course of action. I managed to convince him that it would be a logistical nightmare to immediately change passwords for all service and application accounts. We'd be running the risk of compromising the operation of several critical core applications and services, should something not be done properly in a rush to rectify our vulnerability.

Employee accounts aren't a big deal to change, since users are accustomed to regularly changing passwords. The difficulty is that a massive change all at once would mean a hit for the help desk, and with all user passwords scheduled to be reset on the same date every 90 days, there would be a surge in password-related issues every three months.

There's a bigger problem with the accounts for some of our applications: The password is embedded in the application, so a recoding of the application would be necessary to accommodate a new password. This will be a major project, one meriting its own project manager. In addition to password changes, we will focus on reviewing service and application accounts to ensure that they are configured properly — that is, running with as few permissions as possible and not being permitted to interactively log onto a server.

There will certainly be other things that we'll have to do to address the findings of this risk assessment. Among them, we'll be revisiting our policies and procedures and engaging in a configuration management exercise. As this progresses, I'll fill you in. ▸

WHAT DO YOU THINK?

This week's journal is written by a real security manager, "Mathias Thurman," whose name and employer have been disguised for obvious reasons. Contact him at mathias_thurman@yahoo.com, or join the discussions in our security blogs: **computerworld.com/blogs/security**.

To find a complete archive of our Security Manager's Journals, go online to **computerworld.com/secjournal**.

SECURITY LOG

Contractor Faces Data Theft Charge

A contractor at the Tampa Port Authority in Florida was arrested for allegedly stealing personal information. While working as a computer technician for contractor Siemens Building Technologies Ltd., Daniel E. Glenn told Tampa Port Authority employees that he needed access to the security badge database to repair corrupted data. He then allegedly copied information about thousands of access badge holders and applied for credit cards in the names of about 20 people.

SSA Worker Faces Conspiracy Charge

A former U.S. Social Security Administration employee was charged with disclosing personally identifiable information taken from a government computer. Jennifer Batiste allegedly gave the stolen data to Craig Harris, who then committed $2.5 million in identity fraud. Batiste could be sentenced to 15 years in prison if convicted on charges of conspiracy, accessing a computer to conduct fraud, and disclosure of a Social Security number. Harris, who pleaded guilty to charges of conspiracy and unlawful possession of a means of identification, faces up to 10 years.

Sentence Upped for Tapping Police Data

The sentence was increased for a Derby, England, police officer who provided personal information from a national police database to a known violent offender. James Andrew Hardy, who was originally given a 28-week suspended sentence and 300 hours of community service, must now serve nine months in jail.

QUICK HITS

Maintenance

Top causes of application maintenance inefficiency at large and small IT shops:

	Large companies	Small companies
Poor demand management	51%	54%
Insufficient number of staffers for the work	47%	47%
Lack of tools	41%	40%
Lack of application knowledge	38%	38%
Poor planning of application change	34%	38%
Lack of legacy skills	19%	14%
No rigor in the maintenance process	17%	31%
Lack of up-to-date skills	17%	20%
Poor relationship with users	13%	7%

Base: 103 IT decision-makers at organizations with more than 20,000 people; 174 IT decision-makers at smaller organizations

Multiple responses allowed.

Who funds application maintenance at your company?

	Large firms	Other
Business units	55%	19%
IT budget	41%	55%
IT funds projects; business units fund all changes	11%	16%
Corporate budget	6%	19%
Other	4%	4%

Base: 97 IT decision-makers at organizations with more than 20,000 employees; 169 IT decision-makers at smaller organizations

Multiple responses allowed.

SOURCE: FORRESTER RESEARCH INC., CAMBRIDGE, MASS., FEBRUARY 2007

PAUL M. INGEVALDSON

What to Say to the CEO

IF YOU READ columns in *Computerworld*, you've been offered a lot of advice about how to operate as the CIO. Certainly, such advice is easy to give, but it's often hard to implement. So I thought that I would try to get down to the conversation level and recommend some actual dialogue that you, as the CIO, could have with the boss.

First of all, I'm assuming that, as CIO, you report to the CEO. That's the ideal model. Of course, if it's the COO, that's OK. If you report to another C-level executive or someone even lower in the organization, however, you have much more difficult problems to overcome. But that's another topic.

PAUL M. INGEVALDSON retired as CIO at Ace Hardware Corp. in 2004, after 40 years in the IT business. Contact him at **ingepl@aol.com.**

So in our scenario, you have been called into the boss's office, and the CEO starts the meeting with these memorable words: "Paul, IT costs have been increasing too fast. We have to rein in your expenses just like all of the other departments. This is going to be a tough year for our company, our officers and our stockholders. We must all be team players."

Ah, the moment of truth! As a C-level executive, you have been cutting expenses for years. You now have two choices. The first is to click your heels, salute the flag and say that you are a team player and that IT is a team player and supports the needs of the company. Finish the meeting with the boss, call a staff meeting, and start the red-pencil process.

But that's the easy answer. Remember that you are an officer of the company. In addition to the salary and the status of such a position, your job includes the responsibility of arguing for IT despite resistance by other officers, including the CEO. So in response to the CEO's statement, you can try to explain the nature of IT expenses and use the meeting as an opportunity to make your case. Here's a possible response:

"I agree. Our expenses have been increasing over the past several years. However, I would say that our increases have been a direct result of the many systems we have been developing for the other departments. At the IT steering committee's annual project selection meeting last November, the officers chose systems that provide the best ROI for the user departments. The ROI for these systems indicates that the user departments realize a significant return despite the increased IT costs. In fact, this may be how the other departments are able to reduce their costs without cutting programs. For example, I was talking to Sharon yesterday, and she said that the new budgeting system that we implemented last year is saving her three heads this year."

> Remember that you are an officer of the company. In addition to the salary and the status of such a position, your job includes the responsibility of arguing for IT despite resistance by other officers, including the CEO.

Now the die is cast. Several things could happen at this point. The worst would be that the boss decides that you're not a team player and fires you on the spot. Less dramatic, the CEO could decide that you're not a team player and your status internally would be diminished.

I think these outcomes are rather unlikely, however. Instead, the CEO should really appreciate your argument and the fact that someone has the passion and self-confidence to fight for his department.

Perhaps this time, you may still have to go back and initiate the red-pencil process, but you may notice a different CEO at the next steering committee meeting — one who is more questioning of the user managers who are promoting the development of new systems. The CEO may now understand that IT costs are a reflection of the user department requests.

The best result would be for the CEO to finally understand that IT is not really a cost center but rather a department that enables the other parts of the company to do things more efficiently or to do things in a different way. IT is an investment rather than a cost. Such understanding would be the real win. As I said, it's easier to give advice than it is to implement it. But IT must continue to push its claim that it is the change agent within companies. That's hard to do if budgets are continually cut.

But if modern corporations are going to become more innovative and more efficient, IT must continue to implement bold, cutting-edge systems. The CIOs at these corporations must be willing to make the case for continued investment in IT. That's the biggest challenge for today's CIO.

Have a good conversation!

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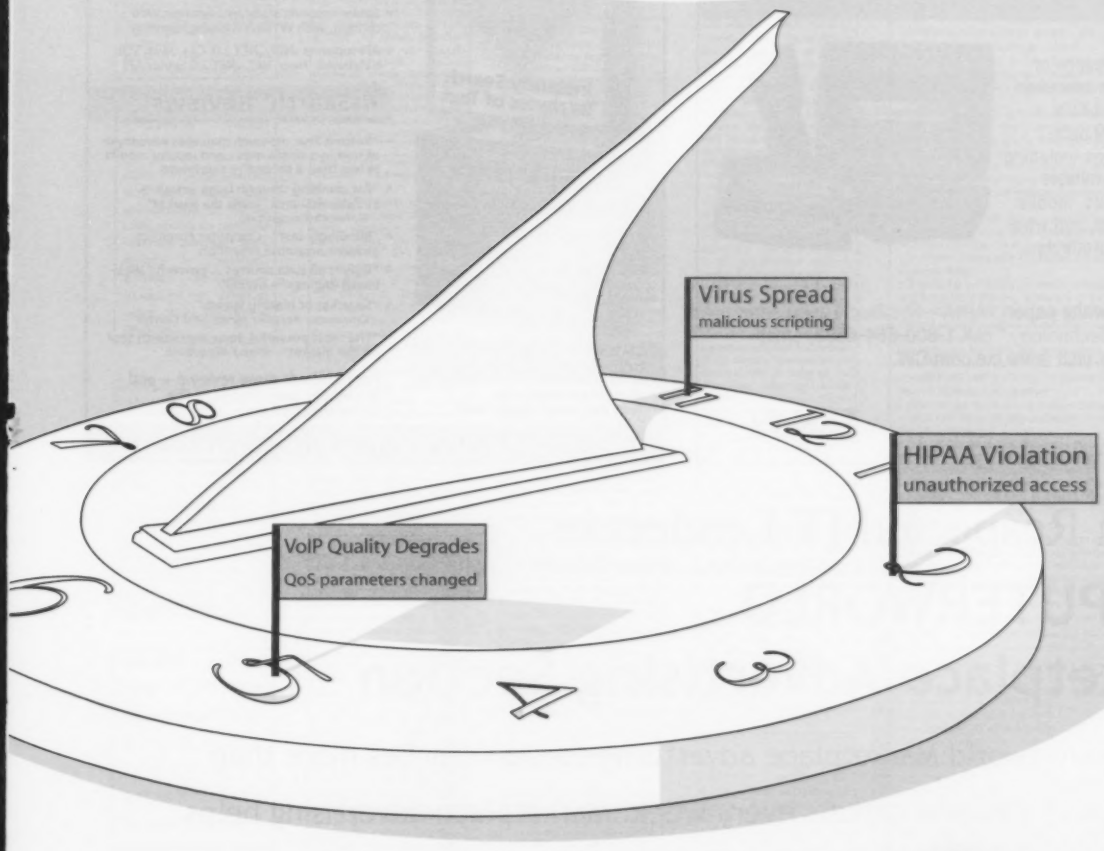

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Programmer Analyst: Atlanta openings, but may be relocated to other cities): Provide installation, configuration and maintenance of Siebel CRM servers on Unix and Windows platforms. Send resume to President, Software Services & Resources, Inc., 3574 Old Milton Pkwy, Alpharetta, GA 30005.

S4 Consultants (job site various) seeks software engineers, system analysts, DBAs to customize application using tools per project requirement (Oracle, Java, C/C++, VB, WebSphere, SAP). Min MS or BS+1-5yr IT exp. Please send resumes to jobs@s4consultants.com. EOE.

Leapers (Livonia, Michigan) has openings for System Analyst, DBA to design and maintain CMS, WMS, supply chain management system (SCM), back order/stage order management system (BKM). Minimum requirement is MS or BS+5yr exp. Apply at tding@leapers.com. EOE.

Enterprise Architect w/exp. in call center programming. Send resume to KeyBank, Recruiting-AL-OH01000102, 2025 Ontario St., Cleveland, OH 44115. Must ref job code PS228843.

Software Engineers, Programmer Analysts, SAP Analysts, Systems Analysts and Business Analysts required for Naperville, IL. Salary based on education, skills and experience. Please send resumes to HR, Anthropology International, Inc. 3655 Hector Lane, Naperville, IL 60564

Software Engineer: Responsible for the Design, Administration, Maintenance and testing of the Datawarehouse including significant exp. on ETL (Extract, Transformation and Loading Process). Job performed using datawarehousing reporting side, Informatica 6.2 ETL tool, Brio Reporting tool, Autosys Scheduler, Control-M Scheduler, Unisys Operating Systems and Unix OS, specifically HP-UX. Heavy mapping exp. and full life-cycle datawarehousing exp is required. Extensive experience in Unix shell scripting (Korn, Borne, C-Shell), PL/SQL, database tools such as Erwin is required. Req BS in CS, Math/ Rel Field+2 yrs exp. Wages: $75,000, 40 hrs/wk, 9am-5pm. Send resumes to: Case#P-05174-81971KMo4, Backlog Elimination Center, Employment & Training Administration, Division of Foreign Labor Certification, 1 Belmont Avenue, Suite#220, Bala Cynwyd, PA 19004 or Fax to (484)270-1615

Programmer Analysts(P/A) & Software Engineers(S/E) for Edison, NJ. P/A: Design & Develop software applications using C++, Delphi, ASP, Erwin, UML, Coolgen, Interwoven, Clear Case, Clear Quest; Bachelors or Eqv req'd in Computers, Eng, Math or related field+2 yrs of related exp. S/E: Design & Test software using Java, J2EE, VB, Tuxedo, Tango, Oracle, PL/SQL, Developer 2000 & Designer 2000. Masters or Eqv req'd in Comp Sce., Eng., Math or related field + 1 yr of related exp OR Bachelors or Eqv. + 5 yrs of progressive related work exp. May be relocated to various unanticipated locations throughout the US. Must have legal authority to work permanently in the U.S. Send resume to HR, Allied Business Consulting, Inc., 34-36 Progress St., Ste. A-2, Edison, NJ 08820

IT company in Irving, TX has openings for SQL Consultant-analyze user requirements, procedures, and problems to automate or improve existing systems and review computer system capabilities using knowledge of database with experience in system analysis, design, and development in Oracle 8i. Experience to include: SQL, PL/SQL, Pro C*. Must be able to travel temporarily to job sites throughout the U.S. with expenses paid by employer. Bachelors degree in Math/Physics/Computer Science/Computer Info Sys/ Mgmt Info Sys/Engineering (any branch) + 2 years of experience in the job offered or 2 years consulting work as above but designated under a different job title is acceptable. 8:00am - 5:00pm. $61,100/Yr. Please fax or mail resumes to Attn: D 05222-97504-700 North Pearl St. Suite # 510, Dallas, TX 75201. Fax 214-237-9116. AJB#39972583.

E-IT Professionals, Inc. is looking for software engineer, system analyst, DBA to design applications using special tools (Java, Oracle, C/C++, SAP, SQL, etc) per project requirements. Must have MS or BS with 1-5yr IT exp. Job sites: various. Contact pete@itprofs.net.

Eximware, a service Co. for global agriculture trade markets (Ann Arbor, MI), seeks Marketing Director/Manager, System Analysts to design commodity trade software. Min requirement is Master or BS+5yr exp. Send resumes to: careers@eximware.com. EOE

SENIOR SOFTWARE DEVELOPER (DATA TRANSFORMATION) - An international company, is engaged in the development of client-server financial software, focusing on portfolio accounting systems, is seeking a Senior Software Developer (Data Transformation). This experience-intensive, highly technical position is responsible for developing highly graphical Enterprise Application Integration (EAI) Delphi-based software tools to model complex metadata for platform-independent transformation applications. The position is also responsible for build-system development and product testing. The job duties of the position call for the demonstrated ability to develop software to represent data processing steps as graphical workflows with visual mapping components; implement Application Programming Interfaces (APIs) specified in Interface Definition Language (IDL) for model manipulation and meta-data import/export of models at the different meta-levels; design and develop automated Quality Assurance (QA) tools for testing and performance benchmarking of meta-data driven EAI applications using JNI-connected C++ and Java; and, develop an automated build system integrating diverse software components utilizing C++ and Delphi compilers, a source-code repository, and email for build status notifications. Minimum education required is at least a Bachelor's degree in Computer Science, Computer Engineering, or Management Information Systems. Minimum experience required is eight (8) years post-degree experience involving software programming using Delphi (Object PASCAL), at least four (4) years of which specifically involved the development of graphical user interfaces and tools to model meta-data schema in UML for EAI applications. Base salary is $ 101,100 per year for a 5 day/40 hour week. A complete benefits package included full medical, dental, life and AD&D coverage, LTD and three weeks earned time off, 401(k) plan, and other industry competitive benefits. Job Location: Boston, MA. Qualified applicants should send resume referencing: ETA Case Number P-05172-75398KHi5, by fax to: (484) 270-1615 or by mail to: Backlog Elimination Center, Employment & Training Administration, Division of Foreign Labor Certification, 1 Belmont Avenue, Suite 220, Bala Cynwyd, PA 19004. An EOE/MFHV.

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SENIOR PROGRAMMER/ANALYST (BLOOD ANALYTE SENSORS) - A Boston-area company engaged in the design, production and marketing of in vitro medical diagnostic products and devices has an immediate need for a Senior Programmer/Analyst (Blood Analyte Sensors). This position involves interfacing with scientific staff who design electrochemical sensors to create the mathematical algorithms that transform the sensor signal into the reported blood analyte value. In addition, the position is responsible for developing the C++ code to implement the algorithms, and then create the JAVA user interface to report the blood analyte values. The position is also responsible for developing SQL database applications and data communications software based on TCP/IP and XML protocols. Education required is a Bachelor's degree in Computer Science, Mathematics or a similarly relevant field. Minimum experience required is 8 years of post-degree industry experience implementing complex mathematical models, algorithms and user interfaces in C++ and Java, at least 2 years of which specifically involved the implementation of blood analyte sensor algorithms. Specifically required is the demonstrated ability to design and implement object-oriented multi-tasking embedded applications in medical instruments on a Linux operating system. Also required is the demonstrated ability to co-develop algorithms with staff scientists for blood analyte electrochemical sensors, and to translate the algorithms into an implementable C++ code. Finally required is the demonstrated ability to develop programs using TCP/IP sockets, XML, HTML, SQL, Servlet, and J2EE application architecture. Annual salary is $ 83,500 per year, for a 5 day/40 hour week, together with contributory medical, dental and disability insurances, full life insurance, two weeks paid vacation, and other industry-competitive benefits. Job Location: Lexington, MA. Qualified applicants should send resume referencing: ETA Case Number P-05175-83770sjo9, by fax to: (484) 270-1600 or by mail to: Backlog Elimination Center, Employment & Training Administration, Division of Foreign Labor Certification, 1 Belmont Avenue, Suite 220, Bala Cynwyd, PA 19004. An EOE/MFHV.

APPLICATIONS ARCHITECT: Develop & maintain the N-tier applications developed in .Net platform (ASP .Net, VB.Net, C#) & Visual Basic using Active-X controls. The backend server will be utilizing SQL Server 7/2000. The software will support Win Xp, Win 2000, Win NT and Win 98 clients, and UNIX and Win 2000 servers. Reqs knowledge of .Net platform as well as Visual Basic, Active Server Pages (ASP), MTS, Web Services, and COM/DCOM and ADO. Knowledge of N-tier software and understanding of Object Orientation, Windows NT/2000 and Networking is essential. Reqs BS in Computer Science (or equivalent); 2 yrs exp in the job offered or as Software Developer - Systems; $80,000.00 yr; 9:00 am - 5:00 pm; 40 hr wk; Job in Ft Lauderdale, FL. Fax (484) 270-1600 or Mail resume to Backlog Elimination Center, ETA, Division of Foreign Labor Certification, 1 Belmont Avenue, Ste. 220, Bala Cynwyd, PA 19004. Re: ETA Case #P-05166-67251BWa.

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Service Delivery Engineer. Cincinnati, OH. Maintain local and wide area networks of diverse computer systems. Required: 2 years experience in job offered/related. NO PHONE CALLS. Forward resumes to: Mr. Mark Jenkins, Logicalis, Inc., 1750 South Telegraph Road, Suite 300, Bloomfield Hills, MI 48302, Ref: MRPERM.

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Don Tennant (508) 620-7714
Editor in chief

Mitch Betts (301) 262-8243
Executive editor

Julia King (610) 532-7599
Executive editor, events

SECTION EDITORS

Craig Stedman (508) 820-8120
News editor

Mike Bucken (508) 820-8562
Assistant News editor

Kathleen Melymuka (508) 820-8118
Features editor

Ellen Fanning (508) 820-8204
Special reports editor

NATIONAL CORRESPONDENTS

Gary Anthes (703) 536-9233

Thomas Hoffman (845) 988-9630

Julia King (610) 532-7599

Robert L. Mitchell (508) 820-8177

REPORTERS

Brian Fonseca (508) 620-7729
Storage; disaster recovery and business continuity

Matt Hamblen (508) 820-8567
Mobile and wireless; handhelds and laptop PCs; networking

Heather Havenstein (919) 629-2781
Business intelligence; application development; Web services; Web 2.0; advanced technologies; health care industry

Gregg Keizer (541) 686-6670
Security vulnerabilities, breaches and patches; Apple; Web browsers; general assignment

Eric Lai (425) 367-4359
Microsoft; Windows; desktop applications; databases

Linda Rosencrance (508) 628-4734
E-business; green computing; transportation and automotive industries; general assignment

Marc L. Songini (508) 820-8182
Software as a service and hosted applications; ERP, supply chain and CRM applications; RFID; e-voting; retail, food and agribusiness industries

Patrick Thibodeau (202) 333-2448
Outsourcing; immigration; federal government policies; desktop chips and systems; servers and server processors; high-performance computing

Jaikumar Vijayan (630) 978-8390
Financial services industry; corporate security/privacy issues; related legislation and regulations

Todd R. Weiss (717) 560-5255
General assignment; open-source technologies

OPINIONS

Mark Hall (503) 391-1158
Editor at large

Frank Hayes (503) 252-0100
Senior news columnist

COMPUTERWORLD.COM

Scot Finnie (508) 628-4868
Online editorial director

Sharon Machlis (508) 820-8231
Managing editor/online

Ken Mingis (508) 820-8545
Online news editor

Marian Prokop (508) 620-7717
Online editor at large/Mobile & Wireless editor

David Ramel (508) 820-8269
E-mail newsletters/Networking channel editor

Johanna Ambrosio (508) 820-8157
Online servers and data center editor

Angela Gunn (206) 388-2508
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Lucas Mearian (508) 820-8215
Storage channel editor

Valerie Potter (828) 350-8518
Online how-to and reviews editor

Ian Lamont (508) 820-8187
Senior online projects editor

Joyce Carpenter (508) 820-8161
Online projects editor

Ken Gagné (508) 620-7754
Associate editor, community content

RESEARCH

Mari Keefe
Research manager

COPY DESK

Michele Lee DeFilippo (508) 820-8126
Managing editor/production

Bob Rawson (508) 271-8015
Assistant managing editor/production

Eugene Demaitre, Monica Sambataro
Senior copy editors

Carla Dempsey, Donna Sussman
Copy editors

GRAPHIC DESIGN

Stephanie Faucher (508) 820-8235
Design director

April O'Connor
Art director

Owen Edwards
Associate art director

ADMINISTRATIVE SUPPORT

Linda Gorgone (508) 820-8176
Office manager

CONTRIBUTING EDITORS

Jamie Eckle (617) 596-1873
Opinions, features

Preston Gralla preston@gralla.com
Networking/Internet

David Haskin dhaskin@earthlink.net
Mobile & Wireless

CONTRIBUTING COLUMNISTS

Michael Gartenberg, Paul Glen, John Halamka, Michael H. Hugos, Thornton A. May, Bart Perkins, Virginia Robbins, Bruce A. Stewart

CONTRIBUTING WRITERS

Mary Brandel, Stacy Collett, Russell Kay, Mary K. Pratt, Drew Robb

TELEPHONE/FAX

Main phone number (508) 879-0700
All editors unless otherwise noted below
Main fax number (508) 875-8931
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E-MAIL

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COMPANIES IN THIS ISSUE

Page number refers to page on which story begins. Company names can also be searched at **www.computerworld.com**

3PAR-DATA INC. 33
ACCENTURE LTD. 6, 16
ACE HARDWARE CORP. 11, 28
ADOBE SYSTEMS INC. 8
ADVANCED FIBER COMMUNICATIONS 16
ADVANCED SEMICONDUCTOR ENGINEERING INC. 9
ALLEN MATKINS LECK GAMBLE MALLORY & NATSIS LLP 10
ALLSTATE INSURANCE CO. 20
AMAZON.COM INC. 10
AMÉRICA MÓVIL SA 12
AMERICAS' SAP USERS' GROUP 8
AMR RESEARCH INC. 8
APOLLO HOSPITALS GROUP 12
ARDENCE INC. 7
ARKANSAS DEPARTMENT OF FINANCE AND ADMINISTRATION 6
ARKANSAS DEPARTMENT OF INFORMATION SERVICES 6
ASIGRA INC. 9
AT&T INC. 12
ATOS ORIGIN SA 12
AUSTRALIAN DEPARTMENT OF FOREIGN AFFAIRS AND TRADE 12
AVTEX INC. 11
B2B ANALYSTS INC. 8
BANC OF AMERICA SECURITIES PRIME BROKERAGE 33
BANK OF AMERICA CORP. 33
BETH ISRAEL DEACONESS MEDICAL CENTER 20, 21
BITTORRENT INC. 10
BT EXACT 18
BT GROUP PLC 18
BUNGEE LABS 7
BUSINESS OBJECTS SA 11
BUSINESS SOFTWARE ALLIANCE 12
CAREGROUP HEALTHCARE SYSTEM 10, 14
CELANESE CORP. 18
CERNER CORP. 6
CHEVRON CORP. 33
CHRISTIAN & TIMBERS 24
CITRIX SYSTEMS INC. 7
CLEAR-CUBE TECHNOLOGY INC. 7
COGNOS INC. 11
CORNELL UNIVERSITY 7
DIRECTIONS ON MICROSOFT 7
EBAY INC. 10
ECKERD COLLEGE 11
EMERGENCY COMMUNICATIONS NETWORK INC. 11
ENDERLE GROUP 7
ENRON CORP. 15
ENTH INC. 9
EPIC SYSTEMS 15
ERRATA SECURITY LLC 1
ETOUCH SYSTEMS CORP. 7
FORBES.COM 18
FORRESTER RESEARCH INC. 24, 28
FREEDOM COMMUNICATIONS INC. 33
F-SECURE CORP. 12
GARTNER INC. 10, 18, 33
GOOGLE INC. 9, 10
HARRAH'S ENTERTAINMENT INC. 20
HARVARD CLINICAL RESEARCH INSTITUTE 14
HARVARD MEDICAL SCHOOL 10, 14, 20, 21
HARVEY NASH GROUP PLC 24
HEALTHCARE INFORMATION AND MANAGEMENT SYSTEMS SOCIETY 21
HER MAJESTY'S REVENUE AND CUSTOMS 12
HEWLETT-PACKARD CO. 6, 14
HITACHI DATA SYSTEMS CORP. 33
HOLOGIC INC. 8
HYPERION SOLUTIONS CORP. 11
IBM 6, 21, 33
IDC 6, 12
INFORMATION BUILDERS INC. 11
INFOSYS TECHNOLOGIES LTD. 12
INTEL CORP. 9
INTERSTATE BATTERIES 18
J. GOLD ASSOCIATES LLC 10
KEANE INC. 26
KPMG LLP 24
LAKE FOREST HOSPITAL FOUNDATION 21
LANDESK SOFTWARE INC. 9
LECK GAMBLE MALLORY & NATSIS LLP 10
LENOVO GROUP LTD. 6, 10
LONG & FOSTER REAL ESTATE INC. 7
MARRIOTT CORP. 18
MEDICAL INFORMATION TECHNOLOGY INC. 15
MEIJER INC. 33
MESSAGEONE INC. 7, 8, 10, 11, 12, 27, 33
MINCOM LTD. 12
NATIONAL HEALTH SERVICE NORTH WEST 12
NATIONAL RETAIL FEDERATION 16
NORTH ATLANTIC TREATY ORGANIZATION 8
NCR CORP. 14
NEW ENGLAND HEALTH ELECTRONIC DATA INTERCHANGE NETWORK 14
OLIMPIA SPA 12
ORACLE APPLICATIONS USERS GROUP 8
ORACLE CORP. 6, 8, 9
OVUM LTD. 12
OWENS-ILLINOIS INC. 8
PENSKE CORP. 18
PROVISION NETWORKS INC. 7
QWEST COMMUNICATIONS INTERNATIONAL INC. 6
RESEARCH IN MOTION LTD. 1, 10
RETAIL INSIDERS 18
ROCKFORD HEALTH SYSTEM 18
SALESFORCE.COM INC. 10
SAP AG 6, 8
SAS INSTITUTE 14
SIEMENS BUILDING TECHNOLOGIES LTD. 27
SKYPE LTD. 12
SOCIETY FOR INFORMATION MANAGEMENT 24
SOPHOS PLC 12
STATION CASINOS INC. 7
STORAGE NETWORKING INDUSTRY ASSOCIATION 33
SUN MICROSYSTEMS INC. 6
SYMANTEC CORP. 10
TALEND INC. 9
TAMPA PORT AUTHORITY 27
TELECOM ITALIA SPA 12
TELLABS INC. 16
THE BRIAN MADDEN COMPANY LLC 7
THE CARLYLE GROUP 9
THE CONCOURS GROUP 24
THE DATA WAREHOUSING INSTITUTE 11
THE EMPIRE DISTRICT ELECTRIC CO. 1
THE LUKASZEWSKI GROUP INC. 10
THE NEWMAN GROUP 6
TIVOLI SOFTWARE 33
TOMORROW-NOW INC. 6
TOWHEY CONSULTING GROUP INC. 10
U.K. DEPARTMENT OF HEALTH 12
UNIVERSAL SERVICES ADMINISTRATIVE CO. 18
UNIVERSITY OF CALIFORNIA DAVIS HEALTH SYSTEM 33
UNIVERSITY OF MARYLAND 24
UNIVERSITY OF MIAMI 18, 20, 21
UNIVERSITY OF TEXAS 24
U.S. DEPARTMENT OF ENERGY 7
U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES 6
U.S. DEPARTMENT OF JUSTICE 6, 10
U.S. DEPARTMENT OF LABOR 33
U.S. SOCIAL SECURITY ADMINISTRATION 27
UNC LTD. 12
VICTORIA DEPARTMENT OF JUSTICE 12
VICTORIA DEPARTMENT OF SUSTAINABILITY AND ENVIRONMENT 12
VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY 11, 34
VIRTUAL IRON SOFTWARE INC. 7
VISA INTERNATIONAL 12
VMWARE INC. 7
WAYZATA PUBLIC SCHOOL DISTRICT 11
WORLD TRADE ORGANIZATION 12
XO COMMUNICATIONS INC. 9
ZENPRISE INC. 10

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Fujitsu Computer Systems Corporation 4
us.fujitsu.com/computers/reliability
Hyperion 36
http://smartbi.hyperion.com
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ibm.com/systems/innovate20
IBM IT Campaign 10/11
www.ibm.com/outwithcables
IT Executive Summit 25
www.itexecutivesummit.com
LXE, Inc. 30
www.lxe.com/CW
Microsoft Exchange 17
microsoft.com/exchange
Microsoft Forefront 2-3
easyassist.com
Network Instruments 29
www.NetworkInstruments.com/Time
Storage Networking World Best Practices in Storage Awards 23
SunGard Availability Services 19
www.availability.sungard.com/pandemic
Versant 13
www.versant.com

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Virtualization Cutting Storage Costs for Some Large Firms

Maturing technology quickly boosts capacity for bank unit, health center

BY BRIAN FONSECA
SAN DIEGO

Storage virtualization technologies, showing signs of maturity, have become an appealing option for some large companies looking to make better use of installed physical resources to keep up with escalating storage demands.

In interviews at last week's Storage Networking World conference here, sponsored by *Computerworld* and the Storage Networking Industry Association, several IT managers talked about how storage virtualization is cutting technology and management costs at their organizations.

Gary Berger, vice president of technology solutions at Banc of America Securities Prime Brokerage, said his company began looking at virtualization in 2005, when it found it was unable to fully utilize a fragmented IT environment running in multiple data centers.

At the time, the firm's storage system was plagued by management and performance problems, which Berger said were caused by silos of direct-attached storage, coarse whole-disk allocation issues and overprovisioning.

The Bank of America Corp. subsidiary provides hedge fund clients with access to hosted Microsoft Exchange, archiving, IP telephony, file sharing, voice-over-IP and disaster recovery services.

Banc of America Securities built a virtualized storage system for the hosted service using technology from IBM and 3PARdata Inc. to carve physical disks into 256MB chunks, improve I/O throughput and enable streamlined thin provisioning. Prior to implementing virtualization, the company's storage systems failed four or five times per month, according to Berger. But the virtualized system hasn't failed since it was installed a year ago, he said.

"It was important for us to leverage this technology," Berger said. "You can imagine what we can do with it from a hosting perspective."

Since it adopted the virtualized model, Berger said, his company has cut its storage administration costs by 95% and the need for more storage capacity by 50%. He also credited virtualization's service delivery and disaster recovery replication capabilities with further reducing IT costs.

Compliance Aid

Sacramento-based UC Davis Health System implemented a virtualized storage system late last year as part of an effort to comply with Health Insurance Portability and Accountability Act requirements.

Alejandro Lopez, storage manager for technical support and information and communication services, said the regulations require the academic medical center to use a system that can securely house and move medical images and records.

The health care operation's virtualized system includes an IBM AIX-based mainframe connected to IBM Shark ESS 520 and FAStT storage servers, Lopez said.

> It was important for us to leverage this technology. You can imagine what we can do with it from a hosting perspective.
>
> GARY BERGER, VICE PRESIDENT OF TECHNOLOGY SOLUTIONS, BANC OF AMERICA SECURITIES PRIME BROKERAGE

Last December, it began using the native capabilities in a newly installed Hitachi Data Systems Corp. TagmaStore Universal Storage Platform to virtualize tape on the mainframe and storage systems, Lopez said. The IT operation can now store 4TB of cardiology images and PDF documents, previously held on optical disc systems, in the virtual AIX environment, he added.

"By moving to cheaper storage [through virtualization], we saved about 40% in costs," said Lopez. He acknowledged that he first planned to virtually store only 500GB because he was unsure whether the technology would meet his needs. However, he said, the initial success persuaded him to go forward with 4TB.

Lopez noted that he discussed the project with a number of users at SNW and concluded that several didn't fully understand the concept of virtualization.

"I think there's a misconception by people who think of virtualization as a solution instead of as a tool," he said. "Every vendor has in their mind what virtualization means. At the end of the day, end users are confused."

Continued from page 1

Gender Gap

choice that I made not to," she added, noting that her husband is a firefighter who works various shifts.

King discussed her decision last week at the Storage Networking World conference, sponsored by *Computerworld* and the Storage Networking Industry Association.

Some attendees said King's situation is but one example of what could become a major problem for IT organizations: An alarming number of women are abandoning IT jobs that require them to be on call at virtually all hours. Some attendees noted that not only are women leaving such jobs, but few others are showing interest in joining the IT profession.

The U.S. economy is expected to add 1.5 million IT jobs by 2012, according to the U.S. Department of Labor statistics. At the same time, research firm Gartner Inc. predicts that by 2012, 40% of women now in the IT workforce will have moved away from technical career paths to pursue more flexible business, functional, and research and development careers.

That projection doesn't bode well for companies that will be looking for skilled women who can round out and manage teams that run and maintain storage environments.

Dot Brunette, network and storage manager at Grand Rapids, Mich.-based retailer Meijer Inc. and a 30-year IT veteran, said that women are tending to migrate out of storage-related IT jobs because of the long hours and heavy user demands.

"IT is very much a culture, and it consumes a lot of time," said Brunette. "I think women in that regard are at a real disadvantage."

She noted that the reason why many companies can't attract female workers and may see them leave key IT jobs is because they fail "to provide day care at work, or work-at-home options for someone who leaves to have a child."

Brunette manages 10 staffers — including only one woman — who oversee Tivoli Storage Manager and other tape storage tools in Meijer's IT operation.

Serge Mukoka, technical infrastructure team lead at San Ramon, Calif.-based Chevron Corp., said he has difficulty finding and recruiting women to become part of the IT group at the energy firm. "What I like about [working in an IT storage] environment is it's very performance-driven, so we get to look at new stuff all the time. But even that doesn't seem to help us retain female candidates," said Mukoka. "We [also] have a hard time finding them. I definitely see a challenge there for us."

Lisa Johnson, manager of systems at Irvine, Calif.-based media company Freedom Communications Inc. and an IT administrator for 15 years, said she believes that women can provide a crucial balance within IT groups.

"Men are usually fascinated by technology, where women take it as a tool to enhance what they're doing," Johnson said. "Women are definitely more communicative."

Johnson said she currently manages three women and seven men. She noted that mentor relationships, team-building and training are critical in helping to keep women interested in the IT field.

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FRANK HAYES ■ FRANKLY SPEAKING

E-mail Failed

E-MAIL ISN'T ENOUGH. Let's say that upfront, bluntly and without blame. When a gunman opened murderous fire last week at Virginia Tech, the university's e-mail notification system worked just as it was supposed to. But it didn't help. E-mail messages warning students about a shooting on campus might as well have been sent via postcard. By the time anyone read them, dozens more students and teachers were dead.

Would cell phone text messages have saved them? Maybe not. No one could have warned the victims, because no one knew how horrific the massacre would become until the second wave of shootings began. No one but the killer could have known.

But we know this: E-mail isn't enough. It's time to go beyond it.

Look, e-mail was a big advance two decades ago. E-mail made it possible to notify tens of thousands of students, employees or members of any large group in a fast, standardized way. It replaced the unreliable mailroom with technology that IT controlled. We could assign users an address that wouldn't change, and manage the system's capacity and usage. And it was far faster and more effective than what we had before.

Today, it looks slow and ineffective. E-mail is still very useful; so is interoffice mail. But in an emergency, e-mail fails us — not because the technology actually fails, but because the world has passed it by.

Yes, it's possible for users to take e-mail with them, using BlackBerries and similar devices. But most people don't do that.

Today, what students carry are cell phones. What they use is text messaging. It's their always-on, always-connected social lifeline.

We need to start treating it as another kind of lifeline, too.

The technology is available to send mass text messages in emergencies (see story, page 11). The cost of services that do that is about $1 per year per user. Some schools have adopted that approach to warn students in case of tornadoes, earthquakes, fires and other campuswide emergencies.

Why haven't the rest? Because they thought e-mail was enough.

As the events of last Monday demonstrated, it isn't.

And even if better technology couldn't have saved the Virginia Tech victims, we shouldn't accept the idea that we can't do anything that might help in the next emergency.

FRANK HAYES, *Computerworld*'s senior news columnist, has covered IT for more than 20 years. Contact him at **frank_hayes@computerworld.com**.

As IT people, our job is to keep moving forward to match the needs of our users. But our tendency is to stick with what works. E-mail works. It's solid, we know it well, we know how to manage and control it. We're deeply invested in dealing with e-mail problems like spam, phishing and regulatory requirements. And because e-mail looms so important to us, it's easy to assume that it's as important and useful to users.

For younger users, at least, it's not.

There's another reason we're likely to shy away from using texting as our emergency messaging system of choice: We won't have the kind of control we have over e-mail. We can't assign cell phone numbers the way we assign e-mail addresses, so we'll need new systems to collect and regularly update those numbers.

And when we send out a broadcast text message, it will pass through the hands of a service provider, then cell phone systems. We won't get confirmation receipts, we can't measure delivery rates or quality of service — with texting, that's all a crapshoot.

Less control, less manageability, but faster and more effective. Less easy and comfortable for us, but right in line with what users actually need.

It's time to make that change — not to abandon e-mail, but to add texting to our emergency systems. For time-critical, life-and-death situations, whether from fire or flood, tornado or earthquake or murderous rampage, that could make a crucial difference.

This time, maybe it wouldn't have saved lives.

But next time, it might. ▸

If We Told You, You'd Know

Shipping manager tells netadmin pilot fish that the desks in the warehouse office are being replaced and rearranged, so fish drops by. "A user mentions there's a tangle of wires in the corner – could I straighten it out? I tell her I'll do it next week when they move the old furniture out and I can get to the walls," says fish. "At lunch, a different user tells me the fax isn't working. When I check it out, I discover they painted over the weekend, and the spaghetti in the corner is for four of the five phones that they didn't label or reconnect. Now I'm playing eenie-meenie-minie-moe to guess which jacks have a live dial tone and which is for whose extension. Didn't the first user know no one else had a working phone?"

That's the Magic of IT

Pilot fish and his boss are chatting with a student in an IT work-study program when the boss notices a nearby PC's screen is flashing the log-in dialog box. "He said to me, 'Hey, you want to take that one?' " says fish. "I said sure. At this, the work study was all ears, ready to learn the magic of tech support. I walked over to the PC and pulled the chair away from the keyboard tray."

What Could Go Wrong?

This company has a very simple Web page that's supposed to be updated with new price lists in PDF format every quarter. And for the past three years, a user has been uploading those files using a simple administrative interface, says a pilot fish investigating a small problem. "But something stopped working with this upload tool about two years ago, and we just now noticed," fish grumbles. "So for the past two years, not a single change he made actually went live. And not once in two years did it occur to him to open up a browser, go to the Web site and actually see if the changes took effect."

SHARK TANK

Need-to-Know Basis Only

User asks pilot fish to request an exception to the Web-filtering policy implemented at the big company where they work. First let's see what the problem is, fish tells him. "We go to the blocked site together, and there's the Web filter page refusing access," fish reports. " 'What's the policy?' user asks me, and clicks on the 'More Information' link. Sure enough, the policy explanation page is blocked by the Web filtering software."

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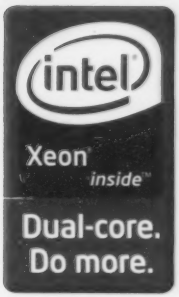

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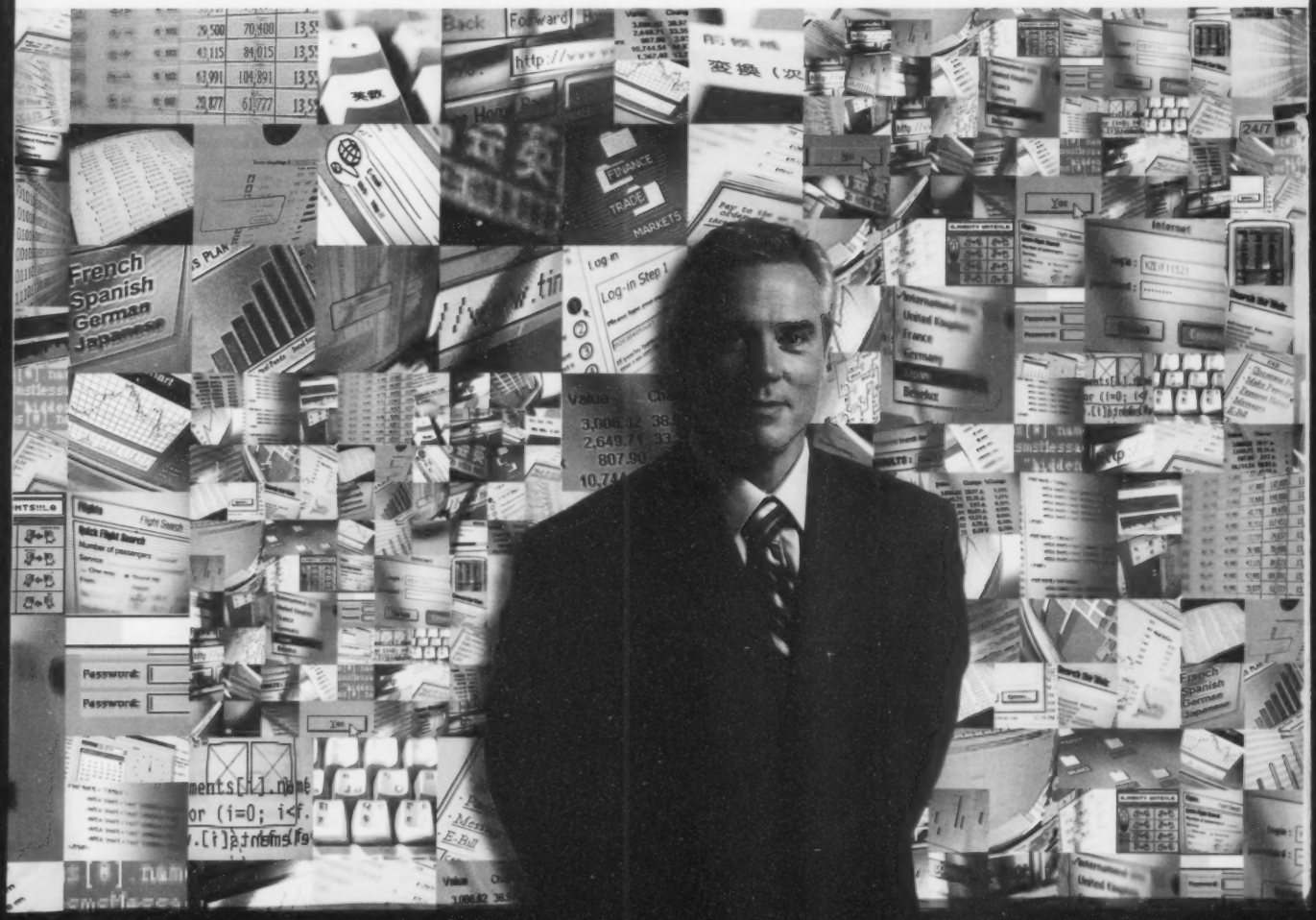
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